



**United States
Department of Commerce**



FY 2006 Budget Summary



**National Oceanic and
Atmospheric Administration
February 7, 2005**

NOAA

“Where Science Gains Value for America”

NOAA’s VISION

An informed society that uses a comprehensive understanding of the role of the oceans, coasts, and atmosphere in the global ecosystem to make the best social and economic decisions.

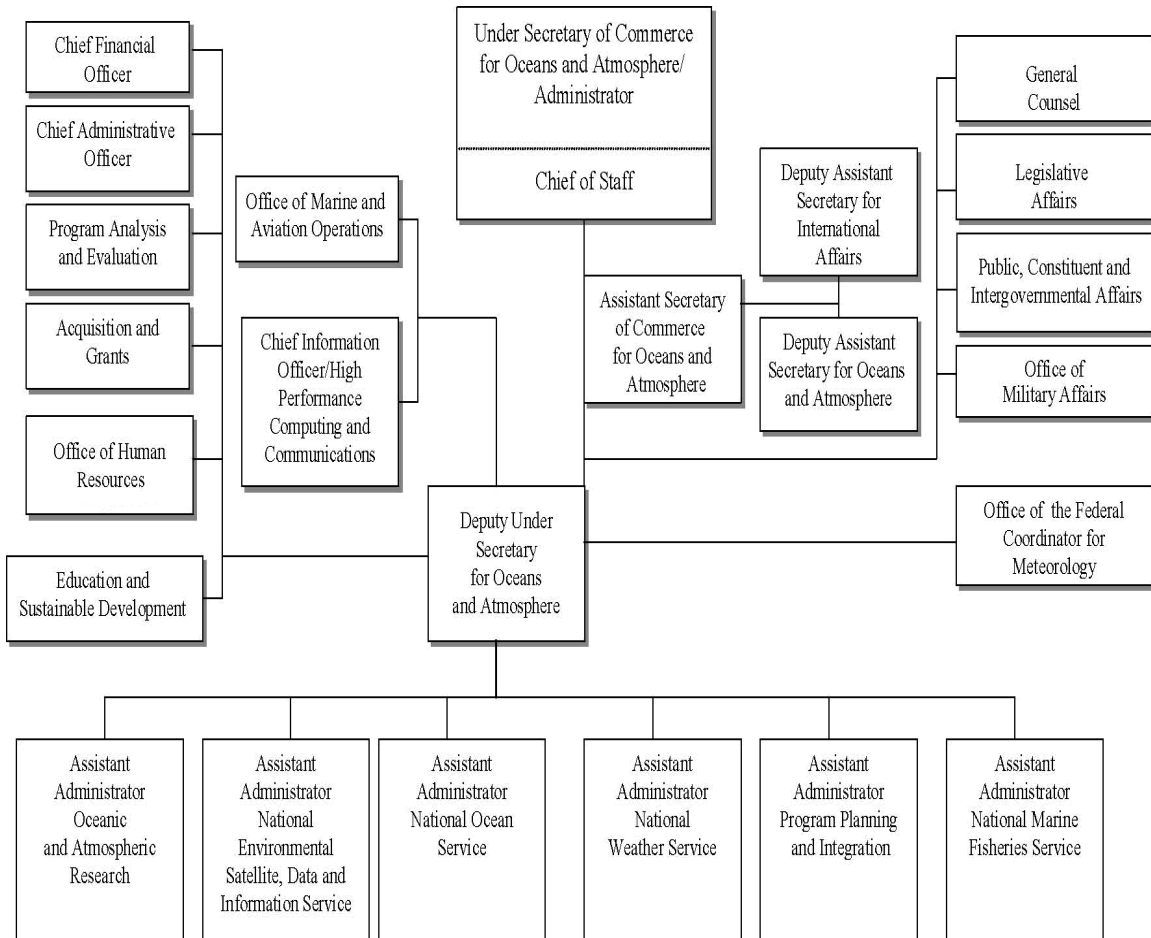
NOAA’s MISSION

To understand and predict changes in Earth’s environment and conserve and manage coastal and marine resources to meet our Nation’s economic, social, and environmental needs.

NOAA’s CORE VALUES

People, Integrity, Excellence, Teamwork, and Ingenuity

U.S. Department of Commerce
National Oceanic and Atmospheric Administration
Organization – 2005



To the Reader:

I am pleased to present the Budget Summary for the National Oceanic and Atmospheric Administration (NOAA) for Fiscal Year 2006. As in the past, this summary is designed to provide information in a concise and user-friendly format. We provide these descriptions and data on NOAA's budget and programs for the information of Members of Congress and their staffs, the media, and NOAA's constituents and customers. This summary tells NOAA's story, and describes how this agency supports and enhances the goals of the Commerce Department and the President.

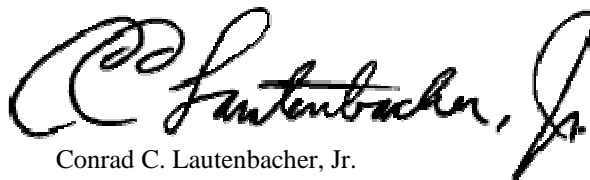
NOAA is where science gains value for the Nation. Americans look to NOAA for an incredible variety of services and support ranging from the local weather forecast, to a sustainable supply of quality seafood, to the safe transport of millions of tons of waterborne cargo, to keep the ocean coastline safe and vibrant, and to maintain detailed research on the climate from the frozen arctic to the depths of the oceans. Through our website at www.noaa.gov, NOAA provides a wealth of knowledge to schools and young people across our Nation, as well as to industry and scientific enterprises.

As our world's population grows to six billion and increasingly stresses our environmental resources, NOAA's capabilities become ever more important. NOAA is a critical part of our Nation's economic structure - its products and services impact the daily lives of every one of our citizens, and have economic consequences which significantly affect our Nation's Gross Domestic Product (GDP). In fact, NOAA touches 30% of the Nation's GDP directly - about \$3 trillion of the American economy. With integrated and sustained observations of the Earth's physical and biological systems, and the web of science and management which form the foundation of NOAA exploration and observation missions, we have the opportunity to better understand the complex interactions taking place on our planet.

NOAA is leading the global effort to expand this understanding through the development of the Global Earth Observing System of Systems (GEOSS), along with over fifty partner nations. A robust GEOSS is critical for us to develop the science necessary to deliver accurate forecasts and hazard warnings, such as for tsunamis and hurricanes, in an ever-changing environment. The recent tragedy in southeast Asia has heightened awareness of the need for a tsunami detection and warning system beyond the Pacific region. With GEOSS, NOAA is ready to lead and support efforts to expand and enhance detection and warning capabilities for the broad spectrum of oceanic and atmospheric hazards the world faces.

The major issues we face today are complex and affect all of our line and staff offices. In order to be effective in attacking the problems of the future, we continue to build a NOAA which supports integrative approaches to solving problems; one which leverages partnerships and is responsive to constituent concerns. The U.S. Commission on Ocean Policy has made it clear that new approaches are needed to managing the oceans, for example. The future of oceans management will require a sustained and committed effort to improving processes government-wide and implementing a cross-cutting, ecosystems-based approach to management that is focused on making the oceans, coasts, and Great Lakes cleaner, healthier and more productive and ensuring that these valuable resources are available for current and future generations to enjoy.

Under the new leadership of Commerce Secretary Carlos Gutierrez, NOAA remains committed to improving the level of service provided to the American people. Finally and most importantly, we appreciate the support NOAA continues to receive from the Congress and our constituents.



Conrad C. Lautenbacher, Jr.
Vice Admiral, U.S. Navy (Ret.)
Under Secretary of Commerce for
Oceans and Atmosphere

A NOTE ON TERMINOLOGY:

The reader should be aware of the specific meaning of several terms as they are used throughout this budget summary:

"FY 2005 Enacted" is:
Fiscal Year (FY) 2005 Appropriation,
less rescissions.

"FY 2006 Base" or "Current Program" is:
FY 2005 Enacted, less Terminations,
plus Adjustments to Base.

"Total Request" is:
FY 2006 Base, plus Program Changes.

TABLE OF CONTENTS

Introduction	iv
FY 2004 Accomplishments by Goal	Chapter 1
FY 2004 Performance Measure Results	Chapter 2
Line Office Summary Budget Table	Chapter 3
NOAA Operations, Research and Facilities by Line Office	Chapter 4
National Ocean Service.....	4-2
National Marine Fisheries Service.....	4-16
Office of Oceanic and Atmospheric Research.....	4-28
National Weather Service.....	4-40
National Environmental Satellite, Data and Information Service....	4-50
Office of Program Planning and Integration.....	4-56
Program Support.....	4-60
NOAA Procurement, Acquisition and Construction	Chapter 5
Systems Acquisition.....	5-4
Construction.....	5-18
Fleet	5-22
Aircraft	5-24
Other Accounts	Chapter 6
Other Discretionary	6-2
Other Mandatory	6-8

Special Exhibits	Chapter 7
Summary by Appropriation.....	7-2
Adjustments to Current Programs (ATBs).....	7-3
FY 2005 – Terminations.....	7-4
Marine & Aviation Operations - Planned Operating Days.....	7-6
NOAA Estimated Federal Funds for R&D.....	7-8
NOAA Control Table.....	7-11

Introduction

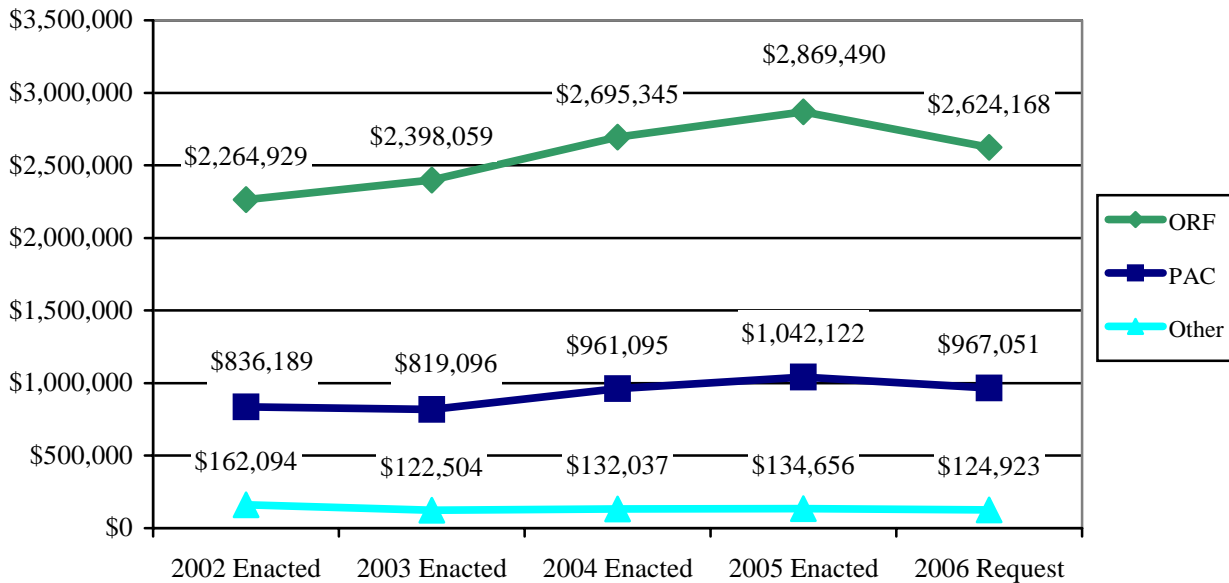


Introduction

(Dollars in Thousands)	FY2005 Enacted	FY2006 Base	Program Changes	Total Request
National Oceanic & Atmospheric Administration				
Operations, Research and Facilities	\$2,869,490	\$2,466,581	\$157,587	\$2,624,168
Procurement, Acquisition and Construction	1,042,122	882,150	84,901	967,051
Other Funds	134,656	124,863	60	124,923
Financing	(127,580)	(130,313)	0	(130,313)
Total NOAA	\$3,918,688	\$3,343,281	\$242,548	\$3,585,829
FTE	11,909	11,938	60	11,998

Budget Trends, FY 2002 - 2006

(Dollars in Thousands)



ORF: Operations, Research & Facilities
PAC: Procurement, Acquisition & Construction
Other: Other accounts



Introduction



In the Fiscal Year (FY) 2006 President’s Budget, the Department of Commerce’s National Oceanic and Atmospheric Administration (NOAA) requests a total of \$3,585,829,000, a net decrease of \$332,859,000, or 8.5% below the FY 2005 Enacted Budget. The request is, however, an increase of \$242,548,000, or 7.3% above NOAA’s FY 06 Base. This FY 2006 request reflects our continuing effort to better serve the American people through advancing mission-critical services. The NOAA staff of dedicated professionals, working with extramural researchers and our international partners, are extending our knowledge of climatic change, expanding meteorological prediction capabilities, improving coastal resource management, charting more of our seas and coasts, and enhancing environment stewardship.

Total Adjustments to Base (ATBs) are \$74.9 million, which are included in the FY 2006 Base level of \$3,343,281,000. These adjustments focus on maintaining and investing in our workforce and supporting NOAA’s most important resource – our people. ATBs are comprised of the cost of inflation, which includes a 2.3% federal pay-raise for FY 2006 and annualizing the FY 2005 pay increase of 3.5%, and also the restoration of rescissions from FY 2005.

Priority Program Change Highlights

The requested total NOAA Program Changes focus on key themes running through this budget, including integration (at both the organizational and systems levels),

partnerships, and early identification of the essential support requirements implicit in NOAA's long-range plans. Scientific research, advanced technology development and operations remain the cornerstones of everything we do.

This budget submission requests the necessary level of resources to carry out NOAA's missions in ways that benefit 1) the economy, 2) the environment, and 3) public safety of the Nation. NOAA is requesting investments in high priority endeavors – specifically, for delivering effective climate and oceanographic products and services, and to enable resource managers to appropriately allocate resources. A summary of the highest priority items in this Budget Summary follow.

Ocean Commission-related Initiatives –

The funding increases highlighted in this NOAA FY 2006 Budget Summary are consistent with Administration priorities, including the *U.S. Ocean Action Plan* – the Administration's response to the U.S. Commission on Ocean Policy (USCOP, or "Ocean Commission") Report. Released by the Commission on September 20, 2004, *An Ocean Blueprint for the 21st Century* contains the Commission's final recommendations for a new, comprehensive national ocean policy. This FY 2006 budget request includes funding to sustain and enhance critical NOAA programs which support the Commission's recommendations, including \$22.7 million total for Ocean Exploration and \$61.2 million total to support the National Sea Grant program.

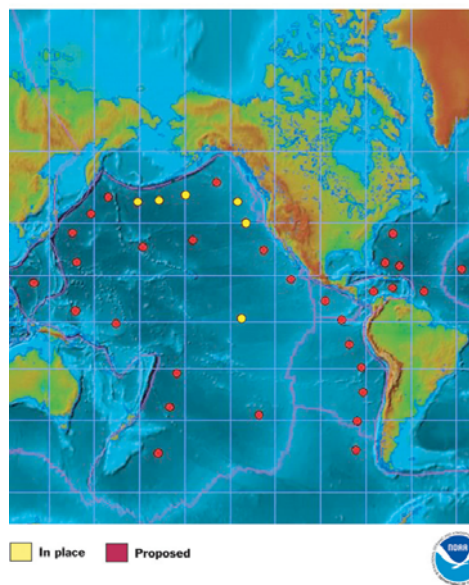
Global Earth Observations –

Approximately \$94.7 million in net increases will support emerging requirements for NOAA's role in building an integrated earth observing system. The new 'system of systems' includes observing platforms in space, the atmosphere, the oceans and on land, as well as data management and calibration, and will "take the pulse of the planet" - providing critical scientific data needed to address global economic, social and scientific challenges. With this improved knowledge, decision-makers around the world will be able to make more informed decisions regarding climate, the environment, and a host of other economic and social issues that are affected by Earth's systems.

Expanded Tsunami Warning Network –

Within Global Earth Observations, NOAA will commit \$24 million over two fiscal years: \$14.5 million in FY 05 and \$9.5 million in FY 06 to expand the existing six-buoy Pacific Tsunami Warning Network. These funds provide for an additional 32 detection buoys by mid-2007 – seven in the Atlantic Ocean, Caribbean Basin and Gulf of Mexico, and 25

Proposed DART Buoy System



in the Pacific Ocean. The program will also procure 38 new sea level monitoring/tide gauge stations, provide 24/7 warning coverage at the Pacific and Alaska Tsunami Centers, upgrade 20 seismometers used to improve tsunami detection, and expand the TsunamiReady program to improve community preparedness.

Full Funding for Satellite Systems –

Included within the Global Earth Observations increase is full funding for satellite systems. The \$82.98 million gross increase for NOAA’s geostationary environmental satellite (GOES-R) is part of the planned funding profile. This request will fund critical developmental activities, including continuing instrument contracts and the program definition and risk reduction for the overall GOES-R system, to prepare for launch in 2012. The President’s Budget also fully funds NOAA’s national polar-orbiting satellite (NPOESS) program, an increase of \$16.1 million. The first NPOESS satellite will be launched by February 2010.

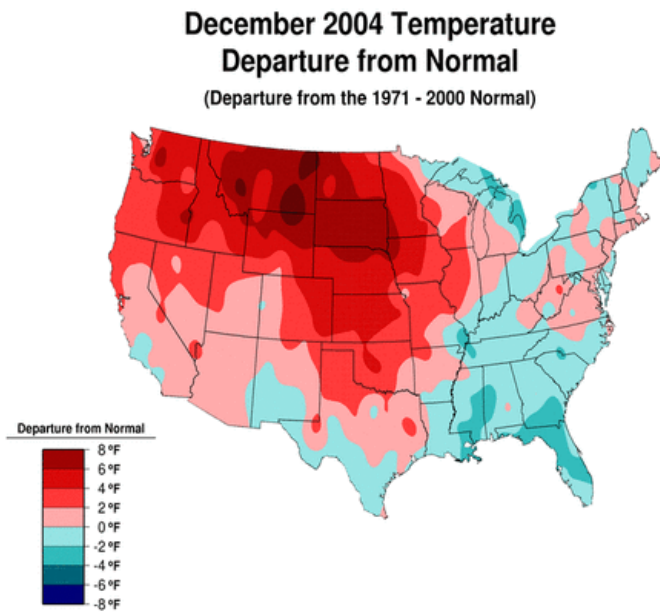
Ecosystems Based Fisheries Management –

NOAA’s requests over \$90 million in increases in FY 06 for projects and operations which support fisheries management. An “ecosystems approach” is adaptive, geographically specified, takes into account ecosystem knowledge and uncertainties, considers multiple external influences and strives to balance diverse social objectives in management. Included in this amount are funds for the fishery observers and coral reef programs to help NOAA move towards broader ecosystem based environmental management.

Expands Climate Observations and Services –

Climate research will benefit from the requested increases of \$19.7 million to expand our Ocean Observations systems and Tropical Buoy capabilities, further our studies on

Aerosol-Climate Interactions to advance the President’s Climate Change Science Program (CCSP), enhance our ability to explain climate conditions to improve predictions, and support the Regional Integrated Science Assessment (RISA) teams. An offset of \$1 million is proposed in the Global Climate Atmospheric Observing System. In addition, \$7.4 million is requested to sustain operations in climate research activities.



Improve Weather Forecasts and Warnings –

An additional \$8.7 million is requested to expand and to modernize NOAA Weather Radio, to enhance Information Technology (IT) systems at the National Centers for Environmental Prediction (NCEP), to improve data assimilation for weather forecasts, and to complete and sustain the NOAA Weather Radio Network.

Facilitate Intermodal Transportation

With \$18.8 million in increases, NOAA seeks to protect lives, economic investment and environmental integrity by providing critical support to the Nation's intermodal transportation network. Funding for Electronic Navigational Charts (ENC) and for accurate currents and water level data is essential to the safe and environmentally sound transport of goods in the Marine Transportation System. As an example, confirmation of exact water depths can allow a ship to load valuable extra cargo - just one inch of additional draft can increase revenues up to \$50,000. Improving aviation ceiling/visibility forecasting will result in an estimated savings of \$250 million a year in reduced fuel costs to U.S. airlines.

Support Facilities Maintenance & Construction

There has been substantial growth in NOAA's Facilities Management, Construction and Maintenance program responsibilities to provide effective and efficient services in an environment of scarce resources and aging structures. In order to keep facilities well-maintained, return substandard facilities to their full potential, and construct and renovate facilities to meet mission requirements, NOAA requests a modest net increase of \$2.3 million, including a planned increase of \$6.2 million for the NOAA Center for Weather and Climate Prediction. With these increases, NOAA will institute several initiatives directed at reducing operating costs associated with our older structures.

The increases and other program changes highlighted above will be addressed in greater detail in the remaining parts of the FY 2006 NOAA Budget Summary. We hope to build on our prior successes by addressing future challenges through implementing the management, operational, and technical enhancements proposed in this Summary.



Chapter 1

**FY 2004 Accomplishments
by Goal**



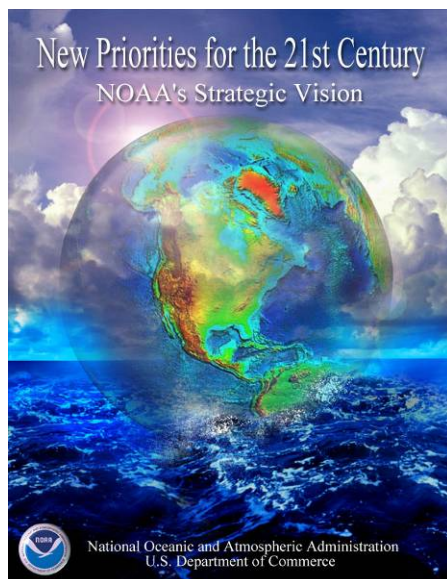
Fiscal Year 2004 Accomplishments by Goal

Based on stakeholder input and internal assessments of our mandates and mission, NOAA has adopted a Strategic Plan, structured with four Mission Goals and a Mission Support Goal around which all of our work is planned and organized. NOAA's Line and Staff Offices execute activities required to achieve these goals through NOAA programs. These programs may involve the activities of more than one Line or Staff Office.

NOAA Mission Goals

- Ecosystems: Protect, Restore, and Manage the Use of Coastal and Ocean Resources Through an Ecosystem Approach to Management
- Climate: Understand Climate Variability and Change to Enhance Society's Ability to Plan and Respond
- Weather & Water: Serve Society's Needs for Weather and Water Information
- Commerce & Transportation: Support the Nation's Commerce with Information for Safe, Efficient, and Environmentally Sound Transportation
- Mission Support: Provide Critical Support for NOAA's Mission

The domains of the four Mission Goals are interrelated, sharing common science and technology challenges and stakeholder interest to some degree. For example, an ecosystems approach to management requires information on weather and climate and must take into consideration commerce and transportation interests. Each Mission Goal must consider its relationship with the others in developing and implementing plans and programs. Similarly, the Mission Support Goal provides vital NOAA-wide services in support of all Mission Goals.



"Matrix management simply means that in addition to the 'islands' there will now be a clear bridge linking team talent, funding and management on given issues."

- VADM Conrad C. Lautenbacher (USN-ret) Jan. 12, 2003

NOAA's Strategic Plan 2005-2010
<http://www.spo.noaa.gov/>

In support of these Goals, NOAA achieved many desired accomplishments in Fiscal Year (FY) 2004, as described below:

Ecosystems

Leadership in Global Earth Observing

NOAA continued to exercise international leadership in the development of a coordinated, comprehensive and sustained Global Earth Observation System of Systems (GEOSS), including playing a key role in the developing the draft Strategic Plan for the U.S. Integrated Earth Observation System. Nearly 100 nations and international organizations support the development of GEOSS, which will revolutionize the understanding of Earth and how it works. With benefits as broad as the planet itself, the U.S.-led initiative promises to make people and economies around the globe healthier, safer and better equipped to manage basic daily needs. The aim is to make 21st century technology as interrelated as the plane it observes, predicts and protects, providing the science on which sound policy and decision-making must be built.

Research, Management Help US Fish Stocks to Rebound

The *2004 Status of Fisheries of the United States* report (also known as the Status of Stocks) showed considerable progress was made to address excessive fishing rates and rebuild fish stocks to healthy levels. The Status of Stocks reported four fish stocks were fully rebuilt, a record ten species were removed from the list of overfished stocks and overfishing practices were stopped for five species. The report illustrates NOAA fisheries management programs are successfully restoring the nation's marine resources while providing important economic opportunities for fishing industries.



Fishing Vessel

Better Management Through Fisheries Vessel Monitoring System

NOAA now provides near-real time fishing vessel tracking of more than 2,250 vessels in 14 different fisheries via a satellite-based vessel monitoring program. This is a 36-percent increase over 2003, and the coverage is planned to increase by five fold (8,308 vessels) by 2009. The program provides near-perfect compliance with open and closed seasons, closed areas, and international boundaries and management areas.

Record Amount of Habitat Protected and Restored

Collaboration with national and regional agencies and alliances with over 500 community groups resulted in restoration of more than 3,700 acres of habitat in 2004. Since 2001, NOAA has restored 11,000 habitat acres and opened 555 stream miles, with goals of 30,000 acres restored and 13,000 miles opened over the next 5 years.

Mapping, Monitoring and Managing Coral Reef Ecosystems

NOAA, in collaboration with state and territory partners and other Federal agencies has begun to implement a coherent ecosystem approach to management of U.S. coral reefs, through coordinated monitoring, mapping, research, and management efforts. NOAA has mapped and characterized shallow reef ecosystems in over 50% of the U.S. reef jurisdictions since 2000 and will map the remaining areas over the next few years. In addition, expanded monitoring efforts have produced the first comprehensive ecological baseline assessments for remote U.S. Pacific coral reef ecosystems. These mapping and monitoring efforts are critical to designing, implementing, and evaluating effective management and research activities.

Climate

Climate Reference Network Fills Key Data Gap

NOAA commissioned the U.S. Climate Reference Network (CRN), which now contains 72 stations across the U.S. The Network, in its first full year of operation, is already providing significant data, reducing scientific uncertainty on long-term temperature and precipitation trends – from 5 percent to 3.5 percent for temperature and from 16 percent to less than 10 percent for precipitation. This verification of climate observations improves the tracking of temperature and precipitation trends, giving NOAA scientists and the nation's decision makers more insight into climate variability and change. A total of 110 stations are planned throughout the nation.



Critical Climate Forecast System Becomes Operational

In August, NOAA implemented a new global ocean and atmosphere Climate Forecast System (CFS). Under development for a year by a team of NOAA scientists, the CFS is a coupled model approach, representing the interaction between the Earth's oceans and the atmosphere. It complements our other models and gives NOAA increased confidence to more accurately depict the actual physical processes that occur in nature, such as El Niño. Understanding these interactions are critical for determining climate patterns and providing more accurate forecasts and outlooks on seasonal time scales.

Completion of Model Runs for International Climate Assessment

In October, NOAA completed projections for the upcoming Intergovernmental Panel on Climate Change Scientific Assessment of Climate using a new coupled atmosphere-ocean-land model. The new model was produced by the Geophysical Fluid Dynamics

Laboratory and incorporates finer spatial resolution and better representation of processes affecting climate.

Weather & Water

Successful Team Approach to Hurricane Season

NOAA's National Hurricane Center had unprecedented success dealing with a busy August and September in keeping with the NOAA climate forecast of an above normal hurricane season in 2004. NOAA's collective success was a result of the contributions made by several NOAA entities, from the observations provided by NOAA's satellites, to



NOAA satellite image of Hurricane Ivan taken at 4:15 pm ET on Sept. 15, 2004, just hours before making landfall on the USA Gulf Coast

the models produced by Geophysical Fluid Dynamics Laboratory (GFDL) and Atlantic Oceanographic and Meteorological Laboratory (AOML), to the teams flying the P-3 and G-4 hurricane hunter aircraft, and the offices involved in post-storm damage assessments. NOAA's four- and five-day hurricane forecasts are as good now as three-day forecasts were ten years ago – and the Hurricane Frances and Charley forecasts were even better this year.

National Integrated Drought Information System

NOAA supported the Western Governors' Association's (WGA) development of a plan for a National Integrated Drought Information System. It serves as a roadmap and requirements document for the creation, operation, and management of an effective national drought system. With \$6 billion to \$8 billion in estimated losses to the U.S. economy, and impacts widespread throughout society, NOAA recognizes the value and importance of monitoring and forecasting drought.

All-Hazards NOAA Weather Radio

In partnership with the Department of Homeland Security, NOAA converted its Weather Radio program into an all-hazards warning system. This partnership with DHS extends NOAA Weather Radio's capabilities from primarily broadcasting weather forecasts and warnings to include a wider range of alerts and warnings, both man-made and natural disasters, which will make critical information more readily available to the public. Through WARN, the NOAA Weather, Alert and Readiness Network, alerts can be delivered nationally, regionally or locally, giving DHS a strengthened capability to send emergency messages to national and targeted populations with minimum delay.

DART Buoys Provide Tsunami Warning

NOAA's Deep Ocean Assessment and Reporting of Tsunamis (DART) system hit the bull's-eye on November 17, 2003 when it detected a small tsunami generated by an 7.5-magnitude earthquake near Adak, Alaska. This was the first time NOAA was able to capture tsunami data in real-time since the system was transferred from research to operations in October 2003. NOAA advised emergency managers to avert a tsunami warning because real-time DART data showed the tsunami would not be damaging. Canceling this warning avoided an evacuation in Hawaii, saving the state an estimated \$68 million in lost productivity. The earthquake-tsunami event was similar in magnitude to an event from the same region in 1986, which triggered a tsunami warning resulting in the evacuation of Hawaii coastal areas – at an estimated cost of \$40 million.

NOAA Leads Largest Air Quality and Climate Study

NOAA led hundreds of government and university scientists from across the country, Canada, and in western Europe to sample the quality of the air this summer in the largest air quality and climate study to date. The study was undertaken as part of the International Consortium for Atmospheric Research on Transport and Transformation. A special focus of the sampling was a comprehensive effort to characterize air quality in the northeast U.S., called the New England Air Quality Study.

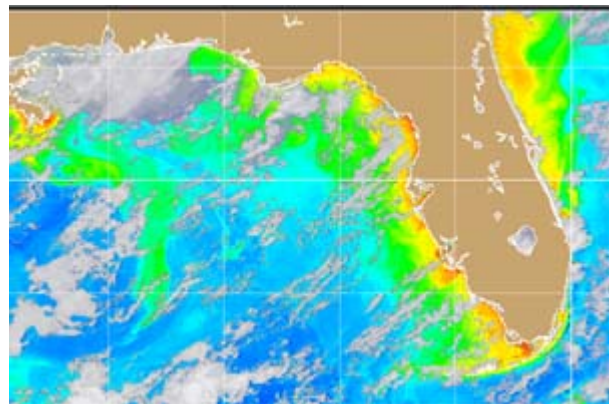
Operational New England Air Quality Forecasts

In June, NOAA began issuing Air Quality Forecasts for the Northeastern United States as part of a joint project with the Environmental Protection Agency. This program will provide critical, high resolution forecasts enabling state and local agencies to issue more accurate and geographically specific air quality warnings to the public. The Air Quality Forecast (AQF) program will provide ozone forecast guidance with enough accuracy and advance notice for people to take action to prevent or limit harmful effects of poor air quality. The program will implement forecasts nationwide beginning this year.

Commerce & Transportation

Harmful Algal Bloom Early Warning System

NOAA announced in September a new ecological forecast system for harmful algal blooms (HABs) in the Gulf of Mexico which became operational on Oct. 1, 2004. The system produces information daily, and forecasts at least twice weekly, which can be used to determine the current and future location and intensity of blooms and the likely impacts to the environment.



NOAA satellite image of chlorophyll concentration in the Gulf of Mexico and Florida coasts taken at 2:31 pm EDT on Sept. 29, 2004

Three Million Navigation Charts Served, and Counting

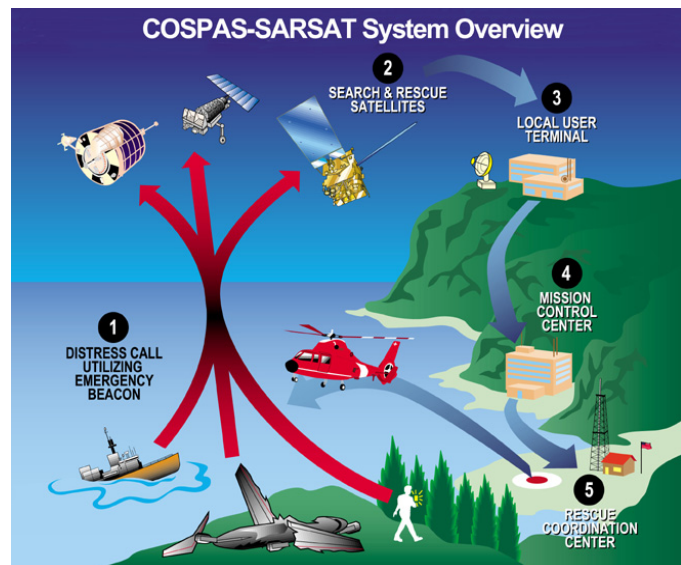
The 3,000,000th Electronic Navigational Chart was downloaded in July 2004. NOAA ENC's are perhaps the most critical component of NOAA's navigation tools – part of a suite of navigation products and services which help ensure the safety of marine transportation, while improving the economic efficiency and competitiveness of American commerce.

NOAA Programs Partner to Improve GPS Information

The Geodesy Program partnered with NOAA's Space Environment Center (SEC) to incorporate Continuously Operating Reference Stations (CORS) data into ionospheric models. The ionosphere distorts Global Positioning System (GPS) signals coming down from space satellites to receivers on the Earth. Because highly accurate models of this phenomenon do not currently exist, NOAA's Geodetic Survey (NGS) is investigating how information about the ionosphere can be derived from CORS, which gather GPS data 24 hours, 7 days a week. With this work, both military and civil users will be able to employ GPS data with greater accuracy in less time.

SARSAT Saves 220 Lives

NOAA's Search And Rescue Satellite Aided Tracking (SARSAT) System aided in rescuing more than 220 lives in U.S. waters and across the country. The system uses NOAA satellites in low-earth and geostationary orbits to detect and locate aviators, mariners, and land-based users in distress. The satellites relay distress signals from emergency beacons to a network of ground stations and ultimately to the U.S. Mission Control Center (USMCC) in Suitland, Maryland. The USMCC processes the distress signal and alerts the appropriate search and rescue authorities to who is in distress and, more importantly, where they are located.



Mission Support

Critical Environmental Satellite Support for the Nation

For special hurricane support, our satellite operations were reconfigured to provide rapid scan 5-minute imaging for an unprecedented full week, with a 99.9% delivery rate for 584 images during hurricane Frances and a 100% delivery rate for 469 images during hurricane Charlie. Overall, NOAA's Satellites provided 12 months of nearly flawless

operation of three satellite constellations consisting of 17 spacecraft. NOAA had a 99.5% success rate for providing mission critical data satisfying customer requirements.

Improving the NOAA Grants Process

Significant improvements made in the NOAA grants process in FY04 have led to more timely awards and fewer awards at the end of the fiscal year. Development and implementation of Grants Online resulted in NOAA being first agency to receive electronic applications through the Grants.gov portal, and Grants Online was selected as a finalist in the 2004 Excellence.Gov awards. During FY 2004, NOAA made on time grant awards worth almost \$972,000,000 to 1501 recipients.

NOAA Fleet Modernization

Significant progress was made this year on modernization of the fleet ships employed to complete NOAA's environmental and scientific missions, within all mission goals. NOAA ship FAIRWEATHER, a de-activated hydrographic survey ship, was re-activated in 2004 after a major modernization and upgrade. NOAA replaced four aging vessels with younger ships acquired from the United States Navy and converted a former United States Coast Guard vessel (re-commissioned HI'IALAKAI) for



NOAA Ship FAIRWEATHER

NOAA research use. The acquisition of these five ships helped reduce the average age of the fleet from 33.6 years to 28.2 years. NOAA initiated construction of several new vessels in FY 2004: a Small Waterplane Area, Twin Hull (SWATH) vessel to support NOAA's mission to promote safe navigation and maritime commerce, and also a new class of state-of-the-art Fishery Survey Vessels (FSV). The first FSV, OSCAR DYSON, was launched on October 17, 2003. A second FSV, the HENRY B. BIGELOW is now under construction, and a third FSV is in the design stage.

NOAA Earns Unqualified Audit Opinion for 6th Straight Year

NOAA has been under the scrutiny of an external audit of our financial statements since 1994, and has received an "unqualified opinion" on its statements each year since 1998. An unqualified opinion is an independent auditor's opinion of our financial statements, given without any reservations. This opinion states that the auditor believes NOAA followed all accounting rules appropriately and that the financial reports are an accurate representation of the agency's financial management.

Chapter 2

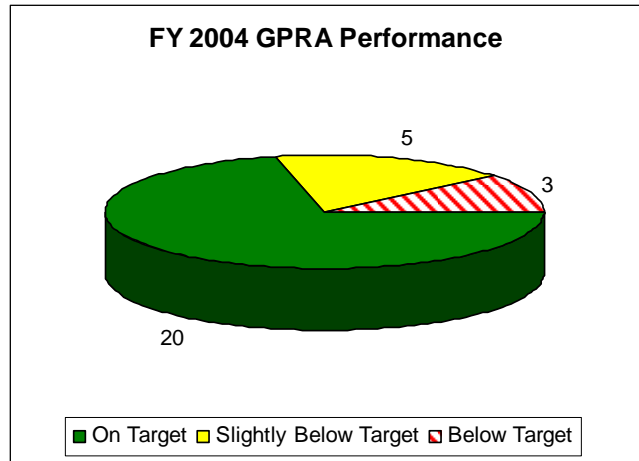
FY 2004 Performance Measure Results



NOAA GPRA Performance

NOAA’s mission goals in ecosystems, climate, weather & water, and commerce & transportation are matrixed, from a funding and organizational perspective, to maximize our support of Departmental performance goals, such as advancing, understanding, and predicting changes in the Earth’s environment to meet America’s economic, social, and environmental needs. NOAA currently has 28 Government Performance & Results Act (GPRA) measures. NOAA performed very well on the majority of our measures in FY 2004, “getting to green” on over 70% (see chart at right). We expect a superior level of performance on our GPRA measures this year. The funding requested in this Budget is essential to improving our scorecard results, as we employ new and modified measures in FY 05 and FY 06 to better represent and assess NOAA’s performance in achieving our mission.

In FY 2004 NOAA performed well on its GPRA-mandated Performance Measures, meeting or exceeding 20 of 28. NOAA GPRA successes include reductions in overfished major stocks of fish, the Nation’s uncertainty in the magnitude of carbon uptake, and hurricane forecast track error. In addition, accomplishments consist of improvements in the number of acres restored and the false alarm rate for aviation forecasts [see Performance Summary, next page].



NOAA’s GPRA goals are focused on the results of key programs and services, support decision-making and congressional oversight, and are designed to measure and improve the performance of NOAA in meeting its mission. GPRA is unique in its requirement that agency “results” be integrated into the budgetary decision-making process. NOAA is constantly striving to improve our measures – adding or modifying several measures for FY 2006 – for the betterment of our service to the American public.

For more information on NOAA’s FY 2004 performance, please refer to the Department of Commerce FY 2004 Performance and Accountability Report (PAR), found here: <http://www.osec.doc.gov/bmi/budget/FY04PAR.htm>

NOAA Performance Summary for FY 2004

Goal	GPRA Measure	FY 2004 Target	FY 2004 Actual	Goal Met?
Ecosystems	Number of Overfished Major Stocks of Fish	43	43	Yes
	Number of Major Stocks with an "Unknown" Stock Status	92	85	Yes
	Percentage of Plans to Rebuild Overfished Major Stocks to Sustainable Levels	90%	90%	Yes
	Number of Habitat Acres Restored (Annual/Cumulative)	3,760/14,780	5,562/16,582	Yes
	Number of Commercial Fisheries Which Have Insignificant Marine Mammal Mortality	8	3	No
	Increase in Number of Endangered Species with Reduced Risk of Extinction	6	5	No
	Increase in Number of Threatened Species with Reduced Risk of Extinction	5	7	Yes
Climate	U.S. Seasonal Temperature Forecasts (cumulative skill score computed over the regions where predictions are made)	21	17	No
	Assess and Model Carbon Sources Throughout the United States	+/- 0.7 Gt. Carbon per Year	+/- 0.5 Gt. Carbon per Year	Yes
	Assess and Model Carbon Sources Globally (Develop Carbon-Climate Scenarios for Input to Assessments)	Develop Scenarios	Activities Completed	Yes
	Determine the Annual Explained Variance (%) for Temperature and Precipitation for the Contiguous United States	Temp: 80% Precip: 55%	96% 90%	Yes
	New Climate Observations Introduced	275	529	Yes
Weather & Water	Lead Time (Minutes), Accuracy (%), and False Alarm Rate (FAR, %) for Severe Weather Warnings Tornadoes	Lead: 12 Acc: 72% FAR: 70%	12 75% 75%	Yes Yes No
	Lead Time (Min) and Accuracy (%) for Severe Weather Warnings for Flash Floods	Lead: 50 Acc: 88%	47 89%	No Yes
	Hurricane Forecast Track Error, 48 Hour (Nautical Miles)	129	94	Yes
	Accuracy (%) (Threat Score) of Day 1 Precipitation Forecasts	25	29	Yes
	Lead Time (Hours) and Accuracy (%) for Winter Storm Warnings	Lead: 14 Acc: 89%	15 91%	Yes Yes
	Cumulative Percentage of U.S. Shoreline and Inland Areas that Have Improved Ability to Reduce Coastal Hazard Impacts	17%	17%	Yes
Commerce & Trans.	Percentage of National Spatial Reference System Completed (cumulative %)	87%	88.2%	Yes
	Reduce the Hydrographic Survey Backlog Within Navigationally Significant Areas (square nautical miles surveyed per year)	2,290	2,070	No
	Accuracy (%) and False Alarm Rate (FAR) (%) of Forecasts of Ceiling and Visibility (3miles/1000 ft.) in Aviation Forecasts	Acc: 46% FAR: 70%	45% 65%	No Yes
	Accuracy (%) of Forecast for Wind Speed and Wave Height in Marine Forecasts	Winds: 57% Waves: 69%	57% 67%	Yes No

FY 2004 Actuals for fish-related ecosystem measures will be available May 31, 2005; projections are included here. For detailed explanation of Performance Measures, please see FY 2004 PAR.

[This Page Intentionally Left Blank.]

Chapter 3

**NOAA Line Office
Summary Table**

LINE OFFICE SUMMARY
(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
National Ocean Service							
ORF	500,905	541,245	179,669	7,290	368,866	25,364	394,230
PAC	103,028	127,050	115,223	173	12,000	2,500	14,500
OTHER	1,334	1,000	0	5,000	6,000	0	6,000
TOTAL, NOS	605,267	669,295	294,892	12,463	386,866	27,864	414,730
National Marine Fisheries Service							
ORF	621,341	676,515	126,059	21,840	572,296	53,168	625,464
PAC	23,200	31,048	29,077	29	2,000	0	2,000
OTHER	113,552	116,082	450	(15,273)	100,359	60	100,419
TOTAL, NMFS	758,093	823,645	155,586	6,596	674,655	53,228	727,883
Oceanic and Atmospheric Research							
ORF	393,317	404,106	70,444	3,961	337,623	24,084	361,707
PAC	21,267	9,663	300	137	9,500	984	10,484
OTHER	0	0	0	0	0	0	0
TOTAL, OAR	414,584	413,769	70,744	4,098	347,123	25,068	372,191
National Weather Service							
ORF	723,426	703,926	13,475	33,433	723,884	20,946	744,830
PAC	101,448	79,055	319	1,151	79,887	14,546	94,433
OTHER	0	0	0	0	0	0	0
TOTAL, NWS	824,874	782,981	13,794	34,584	803,771	35,492	839,263
National Environmental Satellite, Data and Information Service							
ORF	151,670	176,060	33,307	6,821	149,574	4,408	153,982
PAC	675,386	731,388	0	10,642	742,030	67,874	809,904
OTHER	0	0	0	0	0	0	0
TOTAL, NESDIS	827,056	907,448	33,307	17,463	891,604	72,282	963,886
Program, Planning and Integration							
ORF	1,979	2,464	464	4	2,004	0	2,004
PAC	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PPI	1,979	2,464	464	4	2,004	0	2,004
Program Support/Corporate Services							
ORF	178,534	169,069	563	6,306	174,812	24,592	199,404
PAC	7,903	986	986	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PS/Corporate Services	186,437	170,055		6,306	174,812	24,592	199,404
Program Support/NOAA Education Program							
ORF	1,484	18,275	18,275	0	0	0	0
PAC	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PS/NOAA Education Program	1,484	18,275	18,275	0	0	0	0
Program Support/Facilities							
ORF	9,162	33,281	6,610	(9,614)	17,057	5,025	22,082
PAC	6,065	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PS/Facilities	15,227	33,281	6,610	(9,614)	17,057	5,025	22,082
Program Support/Office of Marine & Aviation Operations							
ORF	113,527	144,549	28,871	4,787	120,465	0	120,465
PAC	22,798	62,932	26,225	26	36,733	(1,003)	35,730
OTHER	17,151	17,574	0	930	18,504	0	18,504
TOTAL, PS/OMAO	153,476	225,055	55,096	5,743	175,702	(1,003)	174,699
Total PS ORF	302,707	365,174	54,319	1,479	312,334	29,617	341,951
Total PS PAC	36,766	63,918	27,211	26	36,733	(1,003)	35,730
Total PS Other	17,151	17,574	0	930	18,504	0	18,504
TOTAL, PS	356,624	446,666	81,530	2,435	367,571	28,614	396,185
ALL OBLIGATIONS							
ORF	2,695,345	2,869,490	477,737	74,828	2,466,581	157,587	2,624,168
PAC	961,095	1,042,122	172,130	12,158	882,150	84,901	967,051
OTHER	132,037	134,656	450	(9,343)	124,863	60	124,923
TOTAL, ALL OBLIGATIONS	3,788,477	4,046,268	650,317	77,643	3,473,594	242,548	3,716,142
Subtotal, PAC Adjustments	24,881	0	0	0	(2,000)	0	(2,000)
Subtotal, PAC Transfer	(204)	1,043	0	0	0	0	0
Subtotal, ORF Adjustments	2,759	0	0	0	(16,000)	0	(16,000)
Subtotal, ORF Transfers	(42,200)	(86,846)	0	(12,040)	(80,000)	0	(80,000)
Subtotal, OTHER Discretionary	3,774	(157)	0	0	0	0	0
Subtotal, OTHER Mandatory	(47,722)	(41,620)	0	9,267	(32,313)	0	(32,313)
TOTAL, ALL APPROPRIATIONS	3,729,765	3,918,688	650,317	74,870	3,343,281	242,548	3,585,829

LINE OFFICE SUMMARY

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
--------------------------------------	--	--	---------------------------------------	--------------------------	-------------------------	--	---

FY 2006 Strategic Plan

FY 2006 Strategic Plan - ORF

MISSION SUPPORT	380,304	476,218	61,647	13,059	427,630	32,125	459,755
CLIMATE	238,503	250,468	42,610	5,888	213,746	19,649	233,395
ECOSYSTEMS	1,102,162	1,202,415	288,253	14,234	928,396	62,731	991,127
COMMERCE & TRANSPORTATION	172,030	164,661	28,392	13,308	149,577	19,983	169,560
WEATHER & WATER	802,346	775,728	56,835	28,339	747,232	23,099	770,331
	<u>2,695,345</u>	<u>2,869,490</u>	<u>477,737</u>	<u>74,828</u>	<u>2,466,581</u>	<u>157,587</u>	<u>2,624,168</u>

FY 2006 Strategic Plan - PAC

MISSION SUPPORT	872,608	900,041	112,472	10,953	798,522	73,701	872,223
CLIMATE	3,049	6,448	0	93	6,541	0	6,541
ECOSYSTEMS	2,771	59,039	59,039	0	0	0	0
COMMERCE & TRANSPORTATION	0	0	0	0	0	0	0
WEATHER & WATER	82,667	76,594	619	1,112	77,087	11,200	88,287
	<u>961,095</u>	<u>1,042,122</u>	<u>172,130</u>	<u>12,158</u>	<u>882,150</u>	<u>84,901</u>	<u>967,051</u>

FY 2006 Strategic Plan - Other Discretionary

MISSION SUPPORT	0	0	0	0	0	0	0
CLIMATE	0	0	0	0	0	0	0
ECOSYSTEMS	84,315	90,076	450	(76)	89,550	60	89,610
COMMERCE & TRANSPORTATION	0	0	0	0	0	0	0
WEATHER & WATER	0	0	0	0	0	0	0
	<u>84,315</u>	<u>90,076</u>	<u>450</u>	<u>(76)</u>	<u>89,550</u>	<u>60</u>	<u>89,610</u>

FY 2006 Strategic Plan - Other Mandatory

MISSION SUPPORT	17,151	17,574	0	930	18,504	0	18,504
CLIMATE	0	0	0	0	0	0	0
ECOSYSTEMS	30,571	27,006	0	(10,197)	16,809	0	16,809
COMMERCE & TRANSPORTATION	0	0	0	0	0	0	0
WEATHER & WATER	0	0	0	0	0	0	0
	<u>47,722</u>	<u>44,580</u>	<u>0</u>	<u>(9,267)</u>	<u>35,313</u>	<u>0</u>	<u>35,313</u>

FY 2006 Strategic Plan - TOTAL DIRECT OBLIGATIONS

MISSION SUPPORT	1,270,063	1,393,833	174,119	24,942	1,244,656	105,826	1,350,482
CLIMATE	241,552	256,916	42,610	5,981	220,287	19,649	239,936
ECOSYSTEMS	1,219,819	1,378,536	347,742	3,961	1,034,755	62,791	1,097,546
COMMERCE & TRANSPORTATION	172,030	164,661	28,392	13,308	149,577	19,983	169,560
WEATHER & WATER	885,013	852,322	57,454	29,451	824,319	34,299	858,618
	<u>3,788,477</u>	<u>4,046,268</u>	<u>650,317</u>	<u>77,643</u>	<u>3,473,594</u>	<u>242,548</u>	<u>3,716,142</u>

FY 2006 Strategic Plan - TOTAL APPROPRIATIONS

MISSION SUPPORT	1,252,912	1,376,259	174,119	24,012	1,226,152	105,826	1,331,978
CLIMATE	241,552	256,916	42,610	5,981	220,287	19,649	239,936
ECOSYSTEMS	1,189,248	1,351,530	347,742	14,158	1,017,946	62,791	1,080,737
COMMERCE & TRANSPORTATION	172,030	164,661	28,392	13,308	149,577	19,983	169,560
WEATHER & WATER	885,013	852,322	57,454	29,451	824,319	34,299	858,618
	<u>3,740,755</u>	<u>4,001,688</u>	<u>650,317</u>	<u>86,910</u>	<u>3,438,281</u>	<u>242,548</u>	<u>3,680,829</u>

LINE OFFICE SUMMARY

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
--------------------------------------	--	--	---------------------------------------	--------------------------	-------------------------	--	---

FY 2006 Strategic Plan - with Mission Support (MS) Spread

FY 2006 Strategic Plan - ORF

CLIMATE	351,703	394,878	59,831	8,492	343,539	28,153	371,693
ECOSYSTEMS	1,198,463	1,326,766	303,890	15,776	1,038,652	70,914	1,109,566
COMMERCE & TRANSPORTATION	257,431	269,145	42,661	14,365	240,848	27,777	268,626
WEATHER & WATER	887,748	878,701	71,354	36,195	843,542	30,743	874,283
	<u>2,695,345</u>	<u>2,869,490</u>	<u>477,737</u>	<u>74,828</u>	<u>2,466,581</u>	<u>157,587</u>	<u>2,624,168</u>

FY 2006 Strategic Plan - PAC

CLIMATE	104,882	111,483	13,125	1,371	99,729	8,601	108,329
ECOSYSTEMS	44,743	102,331	64,449	527	38,409	3,545	41,954
COMMERCE & TRANSPORTATION	86,912	89,644	11,202	1,091	79,533	7,341	86,873
WEATHER & WATER	724,557	738,664	83,353	9,169	664,480	65,414	729,894
	<u>961,095</u>	<u>1,042,122</u>	<u>172,130</u>	<u>12,158</u>	<u>882,150</u>	<u>84,901</u>	<u>967,051</u>

FY 2006 Strategic Plan - Other Discretionary

CLIMATE	0	0	0	0	0	0	0
ECOSYSTEMS	84,315	90,076	450	(76)	89,550	60	89,610
COMMERCE & TRANSPORTATION	0	0	0	0	0	0	0
WEATHER & WATER	0	0	0	0	0	0	0
	<u>84,315</u>	<u>90,076</u>	<u>450</u>	<u>(76)</u>	<u>89,550</u>	<u>60</u>	<u>89,610</u>

FY 2006 Strategic Plan - Other Mandatory

CLIMATE	0	0	0	0	0	0	0
ECOSYSTEMS	47,722	44,580	0	(9,267)	35,313	0	35,313
COMMERCE & TRANSPORTATION	0	0	0	0	0	0	0
WEATHER & WATER	0	0	0	0	0	0	0
	<u>47,722</u>	<u>44,580</u>	<u>0</u>	<u>(9,267)</u>	<u>35,313</u>	<u>0</u>	<u>35,313</u>

FY 2006 Strategic Plan - TOTAL DIRECT OBLIGATIONS

CLIMATE	456,585	506,361	72,957	9,863	443,267	36,754	480,022
ECOSYSTEMS	1,375,243	1,563,753	368,789	6,960	1,201,924	74,519	1,276,443
COMMERCE & TRANSPORTATION	344,343	358,789	53,864	15,456	320,381	35,117	355,499
WEATHER & WATER	1,612,305	1,617,366	154,708	45,365	1,508,022	96,157	1,604,178
	<u>3,788,477</u>	<u>4,046,268</u>	<u>650,317</u>	<u>77,643</u>	<u>3,473,594</u>	<u>242,548</u>	<u>3,716,142</u>

FY 2006 Strategic Plan - TOTAL APPROPRIATIONS

CLIMATE	456,585	506,361	72,957	9,863	443,267	36,754	480,022
ECOSYSTEMS	1,327,521	1,519,173	368,789	16,227	1,166,611	74,519	1,241,130
COMMERCE & TRANSPORTATION	344,343	358,789	53,864	15,456	320,381	35,117	355,499
WEATHER & WATER	1,612,305	1,617,366	154,708	45,365	1,508,022	96,157	1,604,178
	<u>3,740,755</u>	<u>4,001,688</u>	<u>650,317</u>	<u>86,910</u>	<u>3,438,281</u>	<u>242,548</u>	<u>3,680,829</u>

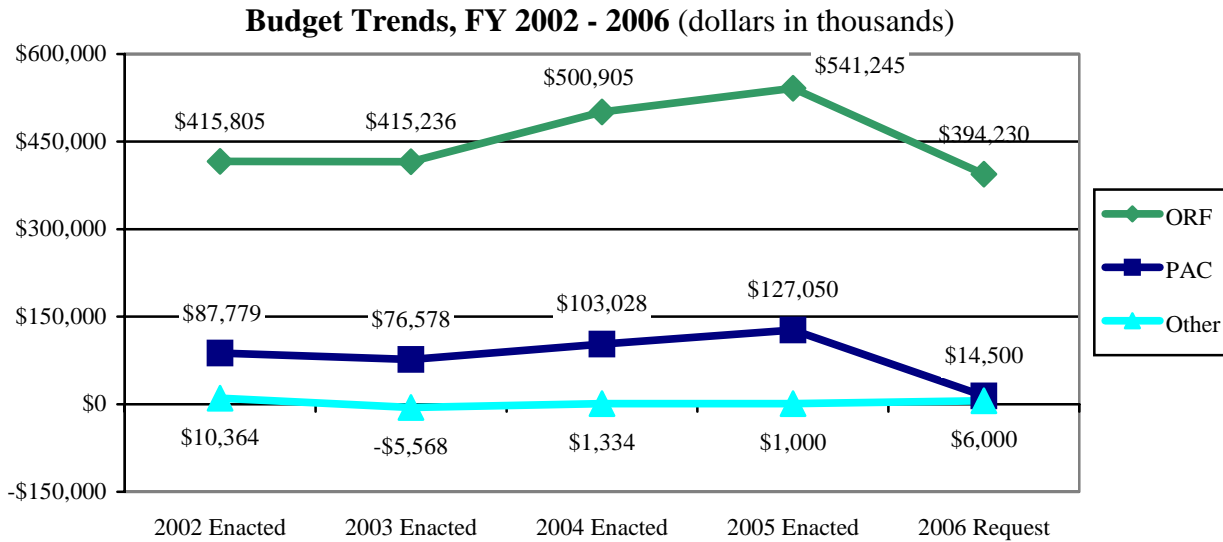
Chapter 4

NOAA Operations, Research and Facilities



National Ocean Service

(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
National Ocean Service -- Operations, Research and Facilities (ORF)				
Navigation Services	\$144,002	\$120,746	\$18,759	\$139,505
Ocean Resources Conservation and Assessment	244,563	122,403	5,603	128,006
Ocean and Coastal Management	152,680	125,717	1,002	126,719
Total, National Ocean Service - ORF	541,245	368,866	25,364	394,230
Other National Ocean Service Accounts				
Total, National Ocean Service - PAC	127,050	12,000	2,500	14,500
Total, National Ocean Service - Other	1,000	6,000	0	6,000
GRAND TOTAL NATIONAL OCEAN SERVICE (Direct Obligations)	\$669,295	\$386,866	\$27,864	\$414,730
Total FTE	1,223	1,231	10	1,241



ORF: Operations, Research & Facilities
 PAC: Procurement, Acquisition & Construction
 Other: Environmental Improvement and Restoration Fund; Coastal Impact Assistance Fund; Coastal Zone Management Fund; and Damage Assessment and Restoration Revolving Fund



National Ocean Service



The National Ocean Service works to preserve America's coastal and ocean resources through scientific research, navigation services, habitat restoration, and protection of marine ecosystems.

NOAA's National Ocean Service (NOS) is the primary Federal agency working to preserve America's coastal resources. NOS provides observation, measurement, assessment, and management of the Nation's coastal and ocean areas, delivers critical navigation products and services, and conducts response and restoration activities. NOS balances environmental protection with economic development by providing the scientific, technical, and management expertise necessary to address the complex challenges of our coastal regions, including the Great Lakes.

More than 148 million people – over 53 percent of the national total – currently reside along the narrow coastal fringes. The population in these coastal areas is expected to increase to about 165 million by the year 2015. This population growth and development places many of the Nation's coastal areas under increasing environmental pressure. Growth in coastal areas creates jobs, generates economic prosperity, adds new industries, enhances educational opportunities, and increases tax revenues. However, it also burdens local environments, threatening the very resources that draw people to the coast.

As the global leader for integrated management of the oceans, NOS promotes a wide range of research activities to create the strong science foundation required to advance the sustainable use of our precious coastal systems. NOS contributes significantly to achieving two of NOAA's four Strategic Plan Mission Goals: (1) support the Nation's

commerce with information for safe, efficient, and environmentally sound transportation, and (2) protect, restore, and manage the use of coastal and ocean resources through ecosystem-based management. While these two goals capture much of the National Ocean Services' activities, NOS also supports and makes important contributions to NOAA's other two mission goals: understand climate variability and change to enhance society's ability to plan and respond, and serve society's needs for weather and water information.

NOS provides improvements in the quality, quantity, geographic distribution, and timeliness of ocean and coastal observations. These observations are critical components of the Nation's Integrated Ocean Observing System, as well as fundamental contributors to the Global Earth Observation System of Systems. NOS mapping, charting, geodetic, and oceanographic activities build on the marine and coastal observations collected to increase the efficiency and safety of marine commerce and support coastal resource management. NOS protects and restores coastal resources injured by releases of oil and other hazardous materials. NOS also manages marine sanctuaries and, in partnership with the coastal states, helps manage the Nation's valuable coastal zones and nationally significant estuarine reserves. Understanding of the coastal environment is enhanced through coastal ocean activities, which support science and resource management programs.

FY 2006 Budget Summary

NOAA requests a total of \$394,230,000 and 1,225 FTE to support the continued and enhanced operations of the National Ocean Service. The total includes \$7,290,000 for Adjustments to Base, \$25,364,000 for Program increases, and \$179,669,000 for Terminations.

ADJUSTMENTS TO BASE:

NOAA requests a net increase of \$7,290,000 and 8 FTE to fund adjustments to base in the National Ocean Service. Within these ATBs, increases will fund the estimated FY 2006 Federal pay raise of 2.3 percent and annualize the FY 2005 pay raise of 3.5 percent. The increase will also provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

The above amount includes an internal transfer of \$153,000 to OMAO for partial funding of NOAA Corps Officer positions that benefit NOS. In addition, \$480,000 and 9 FTE are being realigned to the Office of General Counsel within Program Support.

In addition, NOAA proposes the following transfers of funding within the National Ocean Service. Under the Mapping and Charting line item, the budget proposes to transfer funding for the Vessel Time Charter to the Address Survey Backlog budget line.

Funds in the Address Survey Backlog line will continue to be used exclusively to contract for support in the acquisition and processing of hydrographic data. Under the Ocean Assessment Program line item, NOAA proposes to transfer funding from the Ocean Assessment Program Base to a new National Centers for Coastal Ocean Science line item in order to consolidate funding for this Program Office in one section of the NOS budget.

NOS – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

NOAA requests a net increase of \$25,364,000 and 10 FTE over the FY 2006 base for a total request of \$394,230,000 and 1,225 FTE. These changes are summarized at the sub-activity level below. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. More detailed descriptions are located in the NOAA FY 2006 Technical Budget.

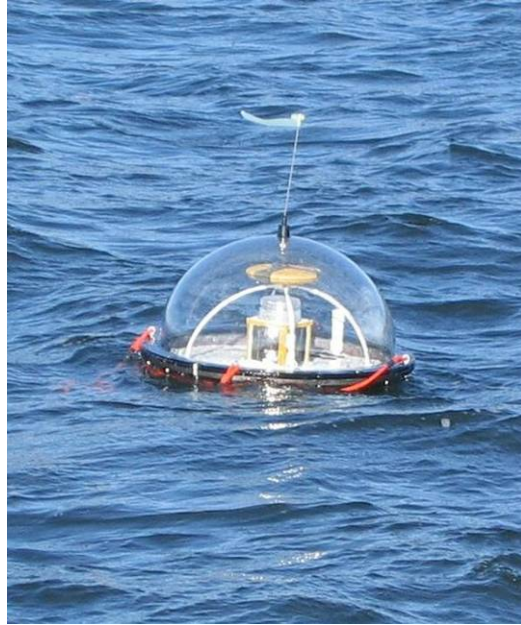
Navigation Services

\$139,505,000

A net increase of \$18,759,000 and 5 FTE above the base is requested in the Navigation Services subactivity. The FY 2006 President's Budget requests funding for a suite of navigation products and services that help ensure the safety of marine transportation, while improving the economic efficiency and competitiveness of American commerce.

- **Mapping and Charting:** \$16,359,000 and 5 FTE in net increases above the base, for a total of \$91,619,000 and 323 FTE, are requested under the Mapping and Charting line item of the Navigation Services subactivity.
 - **NOAA requests an increase of \$1,000,000 and 1 FTE to develop and operationalize data collection and processing improvements for hydrographic and shoreline data.** Hydrographic and shoreline data are the most critical and time-sensitive elements of a nautical chart. Due to recent advancements in technology, the trend toward higher resolution datasets, and congressional support for increased data acquisition, NOAA is facing a situation wherein more data is collected than can be processed and applied to charting products in a timely manner. To help resolve this issue, NOAA will procure and deploy 3 portable GPS-enabled buoys to be used with survey vessels to improve the collection of hydrographic data. This effort will reduce the time required to process hydrographic survey data by up to 10 days per survey — a 5% improvement over current delivery times.

NOAA will also invest in data management research and technology development to improve the speed and accuracy of data acquisition, and accelerate the delivery of navigation information to the maritime community for safe, efficient, and environmentally sound marine transportation. NOAA will begin to implement its research in new technologies and delivery mechanisms, such as geographic information systems (GIS) and web-based interactive programs. NOAA also will improve shoreline data updates by procuring commercial satellite shoreline imagery for change analysis. Satellite imagery is a valuable tool for identifying significant shoreline changes and where new data collection is needed.



Tide buoy

- **NOAA requests \$2,000,000 and 2 FTE to implement the National Vertical Datum Transformation Tool database, or VDatum.** This tool supports NOAA's requirement for hydrographic and shoreline data for our nautical charting products, and continual improvement in surveying and data delivery techniques. VDatum will benefit NOAA's modernization efforts in shoreline measurement and hydrographic surveying for navigation safety. In addition, the tool will enable sharing of geospatial datasets among federal/state/local agencies and academia by translating data between disparate reference datums.

The requested increase will enable NOAA to transition VDatum from successful demonstration projects in areas such as Tampa Bay, Delaware Bay and South East Louisiana to a national scale. Airborne, land, and marine platforms will be able to exploit GPS technology for vertical location, fuse GPS height with other remote sensing technologies, and map the national coastline both above and below water with greater ease and accuracy. The tool will also improve the efficiency and accuracy of hydrographic surveys for nautical charts by eliminating the need for time-consuming water level corrections and post-processing. VDatum models have multiple uses in addition to mapping. For example, VDatum models developed for Puget Sound are now being used to improve inundation estimates from tsunamis.



A loaded barge passes underneath the Oakland Bay Bridge with two feet of clearance - NOAA's state-of-the-art navigation tools make such maneuvers possible

- **NOAA requests an increase of \$1,890,000, for a total of \$6,190,000 for Electronic Navigational Charts (ENCs) to continue the planned incremental investment in the effort to provide full contiguous ENC coverage of U.S. waters.** This increase will allow NOAA to add 145 ENCs in FY 2006, for a total of 670 built and maintained. At the requested funding level, NOAA should achieve complete Electronic Navigational Chart coverage for the Nation by the end of FY 2008. This funding level will allow NOAA to keep the full chart suite under continuous cartographic maintenance.
- **NOAA requests an increase of \$682,000 and 2 FTE for base activities in Mapping and Charting.** This increase will enable NOAA to rebuild capacity for its Navigation Response Teams (NRTs). The requested increase will allow NOAA to fully staff, train and implement NRTs 5 and 6. The increase request will restore contract support and FTE for full staffing, as well as funds for NRT launch maintenance and routine equipment replacement. NRTs support critical ENC field verification, emergency response activities associated with natural and man-made disasters, and National Homeland Security activities. Since their inception, the NRTs have received considerable acclaim from stakeholders such as Port Authorities and the U.S. Coast Guard whom NOAA has assisted with rapid-response hydrographic surveys after recent hurricanes and accidents.
- **NOAA requests an increase of \$300,000 to analyze its efforts in supporting the Nation's commerce with information for safe, efficient and environmentally sound transportation.** The increase will enable NOAA to study the socioeconomic value of its products and services in order to validate its

requirements and responsibilities, better articulate and quantify the benefits of its programs, and more effectively prioritize NOAA's resource investments.

Industry, public and government entities involved with commerce and transportation utilize a wide range of NOAA information, products and services. These include NOAA's navigation products and services; weather information for air, marine and surface transportation; positioning capabilities; emergency response to oil/chemical spills and natural disasters; and commercial remote sensing licensing. With the requested increase, NOAA will systematically collect, compile and analyze new or existing data from industry, academia and other federal, state or local agencies relating to the national socioeconomic benefit of NOAA's Commerce and Transportation-related programs. Using a consistent, rigorous, and scientifically defensible methodology, this approach will generate information about the social and economic effects, benefits, and costs of NOAA programs, information and services. NOAA will use these analyses to prioritize products/services/uses, as well as to identify areas requiring more focused research into economic benefits and social science information to meet future user needs. Data on the economic value and utility of NOAA's suite of Commerce and Transportation products and services will help NOAA to set funding priorities and better allocate taxpayer resources.

- **NOAA requests a total of \$7,499,000, unchanged from base levels, for the Joint Hydrographic Center located at the University of New Hampshire.** The Joint Hydrographic Center was established in FY 1999 as a partnership between NOAA and the University of New Hampshire. The center's activities focus on two major tasks: education aimed at creating a learning center that will promote and foster the education of a new generation of hydrographers and ocean mapping scientists, and research to develop and evaluate a wide range of state-of-the-art hydrographic and ocean mapping technologies and applications.
- **NOAA requests an increase of \$10,487,000, for a total of \$31,487,000, for contract hydrographic survey activities.** This increase will allow NOAA to maintain its planned FY 2006 survey schedule to collect and process approximately 3500 square nautical miles of hydrographic data. The increase will fund contracts for data acquisition.
- **Geodesy:** \$900,000 in net increases above the base, for a total of \$24,756,000 and 183 FTE, are requested under the Geodesy line item of the Navigation Services subactivity.
 - **A total increase of \$900,000 is requested for the South Carolina Geodetic Survey and the California Spatial Reference Center.** South Carolina's exemplary state program works to establish horizontal and vertical geodetic control throughout the state to allow land and land-related items to be referenced

to the national horizontal and vertical coordinate system. The Survey's efforts improve land records management, engineering, land planning, and economic development. NOAA's support of the California Spatial Reference Center has enabled the state to develop a plan to establish and maintain an accurate state-of-the-art network of GPS control stations necessary to meet the demands of government and private businesses for a reliable spatial reference system in California. This infrastructure will aid public health and safety, assist in the protection and preservation of natural resources, and improve the productivity of government and private business.

- **Tide and Current Data:** \$1,500,000 in net increases above the base, for a total of \$23,130,000 and 107 FTE, are requested under the Tide and Current Data line item of the Navigation Services subactivity.
 - **NOAA requests an increase of \$1,500,000 for the National Current Program.** The requested increase will provide resources to ensure that NOAA's Annual Tidal Current Table predictions are maintained in an accurate status by systematically conducting observations to update potentially dangerous tidal current predictions based on old or insufficient data.

Accurate knowledge of tidal currents is essential for safe and efficient navigation. The proper maneuvering of the ever-larger vessels in our nation's constricted ports and harbors relies on accurate tidal current predictions. Knowledge of tidal currents can help vessels avoid collisions, as well as improve transit efficiency by allowing schedules to be aligned with, instead of against, current flows.



Current meter deployment in Cook Inlet, Alaska

Approximately 70% of the over 2,700 stations in the 2002 Tidal Current Tables are based on data that is well over 30 years old. Many of these stations are based on analysis of less than 7 days of data, rather than the 30-day minimum that is required to reflect the true range of tidal current conditions. Products related to the Tidal Current Tables have been withdrawn from publication due to potentially dangerous accuracy uncertainties. At present funding levels, measurements can be made at only the most critical locations (approximately 10 per year) and it will take over 200 years to completely re-observe all the locations in the Tidal Current Tables.

The requested funds would increase the number of current observation stations being observed from 10 per year to 70 per year (35 in priority areas and 35 in remaining areas), making significant progress toward the target recycle rate (130 stations/year total) for the system. Over 90% of the requested funds would be outsourced for data collection contracts after capital equipment investment of approximately \$250,000 in the first year.

Ocean Resources Conservation and Assessment

\$128,006,000

A net increase of \$5,603,000 and 4 FTE above the base is requested in the Ocean Resources Conservation and Assessment subactivity, for a total of \$128,006,000 and 416 FTE.

- **Ocean Assessment Program:** \$1,903,000 in net increases above the base, for a total of \$55,159,000 and 65 FTE, are requested under the Ocean Assessment Program line item of the Ocean Resources Conservation and Assessment subactivity.
 - **NOAA requests an increase of \$403,000, for a total of \$2,903,000, for the Coastal Storms Program.** In FY 2005, NOAA is beginning initial efforts for its Southern California pilot, which will focus on addressing the impacts of winter storms (flooding, erosion, water quality problems). These impacts were particularly acute following the devastating fall 2003 fires. The FY 2006 Request level is necessary to fully implement the Southern California pilot and meet commitments made for the Pacific Northwest pilot (focusing on coastal storm impacts in the lower Columbia River and portions of the Oregon and Washington coasts), which will be in its third and final year. Without the requested increase, implementation of the Southern California pilot will be curtailed or terminated.
 - **NOAA requests a total of \$6,710,000, unchanged from base levels, for the Cooperative Institute for Coastal and Estuarine Environmental Technology (CICEET).** The requested funding will allow this joint NOAA/UNH institute to conduct research and develop new technologies aimed at understanding environmental contamination and improving the effectiveness of restoration efforts.
 - **NOAA requests an increase of \$1,500,000, for a total of \$25,962,000 to improve the condition of coral reefs through support and implementation of locally driven 3-year action strategies.** The requested increase will be used to augment state and territory grants for implementation of Local Action Strategy (LAS) priority projects. In addition, the increase will allow for targeted training and technical assistance to meet LAS-associated needs.

In order to translate the broad national goals proposed by the U.S. Commission on Ocean Policy into on-the-ground action, the U.S. Coral Reef Task Force initiated the Local Action Strategy (LAS) process to develop local conservation initiatives with measurable results in each of the seven U.S. states and territories with coral reefs. The strategies are locally driven 3-year roadmaps for collaborative and cooperative action among federal, state or territory and nongovernmental partners to address specific threats to coral reef ecosystems. The goals and objectives of the LAS are linked to those found in the U.S. National Action Plan to Conserve Coral Reefs, which was produced and adopted by the U.S. Coral Reef Task Force in 2000. The following six focus areas were identified and prioritized by the USCRTF for local action: fisheries management and over-fishing, land-based sources of pollution, recreational overuse, lack of public awareness, climate change and coral bleaching, and disease. Using the six priority USCRTF focus areas as a guide, Florida, Hawaii, Guam, U.S. Virgin Islands, American Samoa, Puerto Rico, and Commonwealth of the Northern Mariana Islands led development of specific Local Action Strategies for each of the locally relevant threats. Implementing additional LAS projects will significantly reduce specific threats to valuable U.S. coral reefs in each jurisdiction. The requested funding will leverage non-NOAA resources for additional on-the-ground action.

- **Response and Restoration:** \$1,100,000 in net increases above the base, for a total of \$24,894,000 and 112 FTE, are requested under the Response and Restoration line item of the Ocean Resources Conservation and Assessment subactivity.
 - **NOAA requests an increase of \$800,000, for a total of \$16,394,000, for base activities in Response and Restoration.** This increase will allow NOAA to rebuild capacity for damage assessment, coastal protection, and hazardous materials response activities. With the requested increase, NOAA will: 1) better protect and restore NOAA trust resources at hazardous waste sites by providing technical assistance and solutions that protect and enhance recovery of coastal resources, their supporting habitats, and human health; 2) increase the number of damage assessments of coastal and marine habitats impacted from releases of oil or other hazardous materials; and 3) increase NOAA's capacity to respond to oil and chemical releases. NOAA provides scientific support to other federal agencies and community-level responders for oil and chemical spills and other hazards threatening coastal environments and communities.



Cleanup following WESTCHESTER grounding and spill in Louisiana

- **NOAA requests an increase of \$300,000, for a total of 7,300,000, to continue clean-up operations on the Pribilof Islands.** Approximately 90% of the contaminated sites on the Pribilof Islands have been remediated. The funds requested in FY 2006 are necessary for NOAA to fulfill the federal government's obligation to decontaminate these islands, and transfer the land back to the native population.

Under the Alaska Native Claims Settlement Act, the Pribilof Environmental Restoration Act, and the Pribilof Islands Transaction Act, NOAA is responsible for conducting environmental restoration on designated properties, and for transferring those properties to the native Aleuts when cleanup is complete. NOAA performs site characterizations, assesses the magnitude and extent of the contamination, evaluates the risk to human health and the environment, and develops corrective action plans for environmental restoration. Site cleanup includes removal of debris, disposal of barrels containing hazardous materials, treatment of petroleum contaminated soils, and ground water monitoring.

- **National Centers for Coastal Ocean Science:** \$2,600,000 and 4 FTE in net increases above the base, for a total of \$47,953,000 and 239 FTE, are requested under the National Centers for Coastal Ocean Science line item of the Ocean Resources Conservation and Assessment subactivity.

- **NOAA requests an increase of \$1,600,000 and 4 FTE to enhance the quality and quantity of ecosystem data collected in support of coastal resource conservation and management activities, conduct additional research in support of Protected Areas management, and provide more information on the types of stressors impacting the Chesapeake Bay.** NOAA will expand the National Status and Trends Program, which collects a wide range of chemical, biological and physical monitoring data that provides the information necessary for NOAA to assess the environmental health of coastal ecosystems. The long term nature of the monitoring data allows scientists to track changes in coastal environmental quality over time. The increase will allow NOAA to sample for new contaminants, and analyze other contaminants, such as mercury and copper, in greater detail. NOAA will also further develop its Harmful Algal Bloom forecasting capabilities, while working to transfer this technology to other agencies and the



Sampling for National Status and Trends Program

public. Finally, the requested funds will be used to support scientific and research activities in the Chesapeake Bay and marine protected areas (MPAs), including those managed by the National Marine Sanctuary Program (NMSP), the National Estuarine Research Reserve System (NERRS), and others, such as the National Park Service.

- **NOAA requests an increase of \$500,000 to conduct additional research into the processes and effects associated with growth and reproduction of Harmful Algal Blooms (HABs).** Harmful algal blooms produce toxins that contaminate shellfish, disrupt ecosystems, cause fish and marine mammal mortalities and have resulted in regional economic losses exceeding \$1 billion in the past two decades. Virtually every coastal state has reported major harmful algal blooms. Funding will be used for: 1) development of improved molecular tools to detect toxins and monitor harmful algal species; 2) experimental and field based studies on the transfer of toxins from harmful algae through the marine food web; and 3) development of conceptual and predictive, numeric models of HAB initiation and growth to facilitate forecasting of HABs. Development of more effective screening and monitoring methods has been requested by shellfish managers and public health officials in California and Washington. Pacific Northwest Tribal members need a rapid screening tool for field use to protect their people who harvest shellfish extensively. The toxin transfer studies will be used to identify the most appropriate bioindicators of toxin accumulation in the marine food web. The predictive models will help focus the monitoring efforts of public health officials and provide early warnings to resource managers and coastal businesses.

- **NOAA requests an increase of \$500,000 to strengthen its ability to identify causal agents of marine organism diseases.** One of the goals of the Chesapeake Bay 2000 Agreement is to develop, promote and achieve sound land-use practices that protect and restore watershed resources and water quality, maintain reduced pollutant loadings for the Bay and its tributaries, and restore and preserve aquatic living resources. To support this goal, NOAA requests an increase of \$500,000 to develop a better understanding of the effects of different land use practices on the health of the Bay's resources, particularly on the incidence of disease in commercially important species in the Bay. Multiple stressors are causing increased incidence of disease, but the precise relationships between these stressors, the causal agents of diseases, and the resource response is unknown. Better understanding of these relationships will provide managers around the Bay better information upon which to base management decisions to protect this environment while confronting pressure for economic growth.

Ocean and Coastal Management

\$126,719,000

A net increase of \$1,002,000 and 1 FTE above the base is requested in the Ocean and Coastal Management subactivity, for a total of \$126,719,000 and 196 FTE.

- **Coastal Management:** A net program increase of \$1,002,000 and 1 FTE above the base, for a total of \$91,068,000 and 56 FTE, is requested under the Coastal Management line item of the Ocean and Coastal Management subactivity.
 - **NOAA requests an increase of \$575,000, for a total of \$16,975,000, to expand the National Estuarine Research Reserve System.** The increase will allow NOAA to improve monitoring through a new Texas NERR, which is scheduled for designation in late 2005. This new reserve is located in a biogeographic region that is not currently represented within the System. This increase will provide operational funds for education, stewardship and research activities at the new Reserve. Specifically, funding will provide equipment and staffing support for physical and biological monitoring to implement the NERRS System Wide Monitoring Program. It will also support implementation of NERRS education and coastal training programs at the reserve, as well as stewardship programming to support NERRS strategic goals and objectives.



Proposed 235,000-acre Texas NERR in the Mission Bay-Copano Bay-Aransas Bay System

- **NOAA requests an increase of \$427,000 and 1 FTE, for a total of \$7,328,000 and 48 FTE, in Coastal Zone Management Act Program Administration to administer the Coastal Zone Management Act and support an expanded National Estuarine Research Reserve System that includes a new reserve in Texas, as described above.** The increase will support NOAA staff at the Office of Ocean and Coastal Resource Management to work with the new reserve and fund the associated travel, equipment, training, rent and supply costs. When new reserves are designated, it is important that NOAA be able to provide technical assistance in research, monitoring, education, and resource stewardship to give new reserve programs a solid start. In addition, the increase will cover printing of revised reserve system information to include the Texas reserve, and contractual funds to update reserve system plans and performance measures for facilities, land acquisition, research and education to cover the addition of a new reserve.

- **Ocean Management:** No changes from the base, for a total of \$35,651,000 and 140 FTE, are requested under the Ocean Management line item of the Ocean and Coastal Management subactivity. Through this line item, NOAA administers the National Marine Sanctuary System under authority of the NMSA. There are 13 designated national marine sanctuaries, ranging in size from one-quarter square mile in Fagatele Bay, American Samoa to over 5,300 square miles in Monterey Bay, CA which is one of the largest marine protected areas in the world. Together, these sanctuaries encompass over 18,000 square miles of waters and marine habitats. In addition, the NMSP administers and manages the 131,818 square miles Northwestern Hawaiian Islands Coral Reef Ecosystem Reserve that is undergoing the sanctuary designation process. The special habitats of the sanctuaries include deep ocean and near-shore corals, live bottom, whale migration corridors, deep sea canyons, areas of deep water upwelling, submerged banks that rise close to the ocean surface, kelp forests, and sea grass beds. With the increasing environmental pressures on our nation's coastal areas, the importance of maintaining a system of marine protected areas is evident. The National Marine Sanctuary System is increasing our knowledge and understanding of complex marine ecosystems. NOAA's sanctuaries help monitor both human and natural changes in the environment that can help us preserve our marine environments.



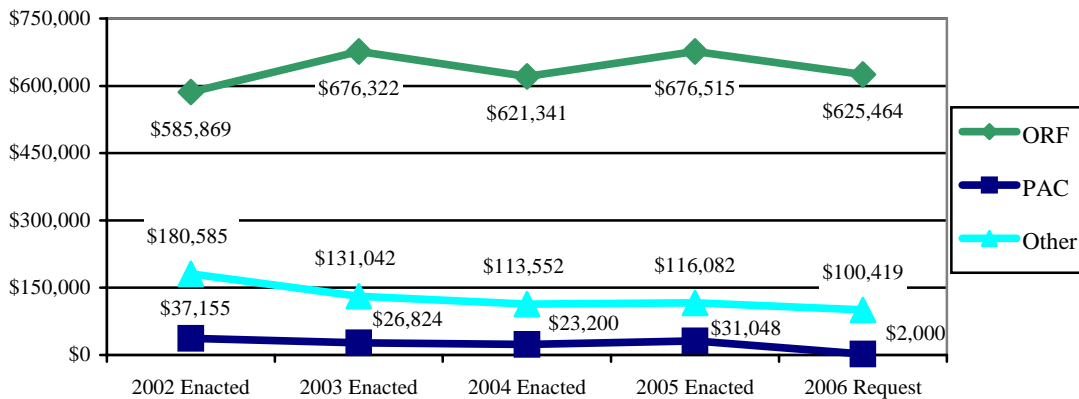
Monterey Bay National Marine Sanctuary



National Marine Fisheries Service

(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
National Marine Fisheries Service -- Operations, Research and Facilities (ORF)				
Protected Species Research and Management	\$175,530	\$131,491	\$27,782	\$159,273
Fisheries Research and Management	297,873	280,355	13,645	294,000
Enforcement and Observers	70,347	72,267	7,896	80,163
Habitat Conservation and Restoration	53,248	36,135	(2,039)	34,096
Other Activities Supporting Fisheries	79,517	52,048	5,884	57,932
Total, National Marine Fisheries Service - ORF	676,515	572,296	53,168	625,464
Other National Marine Fisheries Service Accounts				
Total, National Marine Fisheries Service - PAC	31,048	2,000	0	2,000
Total, National Marine Fisheries Service - Other	116,082	100,359	60	100,419
GRAND TOTAL NATIONAL MARINE FISHERIES SERVICE (Direct Obligations)	\$823,645	\$674,655	\$53,228	\$727,883
Total FTE	2,614	2,557	35	2,592

Budget Trends, FY 2002 – 2006 (dollars in thousands)



ORF: Operations, Research & Facilities
PAC: Procurement, Acquisition & Construction
Other: Fishermen's Contingency Fund; Foreign Fishing Observer Fund; Fisheries Finance Program; Promote and Develop; Pacific Coastal Salmon Recovery Fund; Pacific Coastal Salmon Treaty; and Environmental Improvement and Restoration Fund



National Marine Fisheries Service



NOAA's National Marine Fisheries Service (NMFS) is responsible for the management and conservation of living marine resources within the United States Exclusive Economic Zone (EEZ). NMFS also provides critical scientific and policy leadership in the international arena, and plays a key role in the management of living marine resources in coastal areas under state jurisdiction. NMFS implements science-based conservation and management measures and actions that are aimed at sustaining long-term use and promoting the health of coastal and marine ecosystems.

NMFS' ultimate mission and the focus of its day-to-day efforts is to maximize the benefits to the Nation from the protection and use (commercial, recreational, and aesthetic) of living marine resources. Under its numerous mandates, NMFS works to ensure the long-term health, productivity, and diversity of our Nation's ocean and coastal resources – fish, sea turtles, whales, and myriad other marine and coastal species and their habitats. At the same time, NMFS is charged with balancing multiple needs and

interests, including commercial, recreational, and subsistence fishing; aquaculture; and marine and coastal observation and research. These activities rely on a strong scientific and research competency to support the challenging public policy decision process associated with NOAA's stewardship responsibility.

NMFS continues to develop and track key performance measures that demonstrate meaningful results to our constituents and the American public. In FY 2006, NMFS will continue to focus resources on improving the status of overfished fisheries and endangered and threatened species; increasing the number of fish stocks and protected species whose population status is known; putting in place rebuilding, recovery, and conservation plans for major fish stocks and protected species; and restoring habitat for NOAA trust resources.

The FY 2006 President's Budget Request supports funding and program requirements to enable NMFS to be effective stewards of living marine resources for the benefit of the Nation through science-based conservation and management and the promotion of ecosystem health.

FY 2006 Budget Summary

NOAA requests a total of \$625,464,000 and 2,592 FTE to support the continued and enhanced operations of the National Marine Fisheries Service. The total includes \$21,840,000 for Adjustments to Base, \$53,168,000 for Program increases, and \$126,059,000 for Terminations.

ADJUSTMENTS TO BASE:

NOAA requests a net increase of \$21,840,000 and a decrease of 57 FTE to fund adjustments to base across all accounts in NMFS. The increase will fund the estimated FY 2006 Federal pay raise of 2.3 percent and annualize the FY 2005 pay raise of 3.5 percent. The increase will also provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration.

The above amount includes a transfer of \$1,035,000 and 60 FTEs to the Office of General Counsel within Program Support. It also includes a transfer of \$4,000,000 from the Facilities line in Program Support to fund various projects. These activities have traditionally been funded within the NMFS budget.

NMFS – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

NOAA requests a net increase of \$53,168,000 over the FY 2006 base for a total request of \$625,464,000. These changes are summarized at the sub-activity level below.

Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2006 Technical Budget.

Protected Species Research and Management

\$159,273,000

A net increase of \$27,782,000 and 11 FTE above the base is requested in the Protected Species Research and Management subactivity, for a total of \$159,273,000 and 657 FTE.

- **Protected Species Research and Management Programs:** \$2,272,000 and 7 FTE in net increases above the base, for a total of \$30,925,000 and 381 FTE, are requested under the Protected Species Research and Management Programs line item of the Protected Species Research and Management subactivity.

- **NOAA requests \$1,100,000 and 2 FTE to investigate ocean sound and its effects on the recovery of protected species.** Rising levels of ocean sound and their potential effects on marine species, particularly on protected species, has become a significant emerging issue in marine conservation. Sources of ocean sound include natural events (e.g., earthquakes) and anthropogenic activities (e.g., seismic exploration, military sonars, and commercial shipping). Research on human and non-human species indicates that some levels of sound and chronic



Humpback Whales in Hawaii

exposure to sound may affect health, reproduction, behavior, and survival. Recent strandings of marine mammals suggest there may be a relationship between some anthropogenic sound sources and these stranding events. Specific research will be directed at determining the characteristics of sound experienced by marine animals underwater, measuring the behavioral and auditory effects of exposure to ocean sound, and developing cost-effective mitigation measures for ocean sound effects.

- **NOAA requests \$1,172,000 and 5 FTE to expand and modernize protected resources stock assessments by implementing Tier II of the Protected Resources Stock Assessment Improvement Plan.** Currently, the status of more than 200 protected and at-risk marine species is unknown. The requested funding will allow NMFS to increase the number and quality of stock surveys and assessments on which to base regulatory decisions. These assessments provide timely and reliable estimates of distribution, abundance, and mortality for listed species. Imprecise estimates increase the possibility that species will be

misclassified under the Endangered Species Act or Marine Mammal Protection Act, resulting in increased risk to the species, delay of recovery, and additional mitigation measures which, in turn, pose significant economic losses to the regulated community. NOAA is required to evaluate the status of listed species every year for Marine Mammal Protection Act listings and every five years for Endangered Species Act listings, and to reclassify the affected listing as appropriate following these status reviews. Stock assessment priorities include large whales, Hawaiian cetaceans, loggerhead sea turtles, beaked and sperm whales, and coastal and oceanic bottlenose dolphins. This funding increase would enable NMFS to expand studies of stock structure through genetic profiling, improve telemetry techniques (e.g., satellite tagging) for documenting range and habitat use, and deploy new assessment technologies such as towed and autonomous passive acoustic arrays.

- **Other Protected Species (Marine Fish, Plants, and Invertebrates):** \$5,409,000 and 4 FTE in net increases above the base, for a total of \$8,153,000 and 45 FTE, are requested under the Other Protected Species (Marine Fish, Plants, and Invertebrates) line item of the Protected Species Research and Management subactivity.
 - **NOAA requests \$2,300,000 and 1 FTE to initiate pilot proactive conservation efforts for species nearing the need for listing under the Endangered Species Act (ESA).** This pilot program aims to implement threat-reducing, on-the-ground conservation actions or management agreements in order to lower the risk of extinction for two species. These conservation efforts include close partnerships with state and federal agencies, industry, environmental groups, and academia. Adequate and statistically valid stock assessment information will be provided by observer coverage to determine which two species will be addressed. On average, NOAA spends approximately \$5 million per year on fulfilling consultations and permitting requirements for each listed species. NOAA intends to use this \$2.3 million investment to implement measures which will prevent a listing of either species, thereby eliminating the need to complete costly ESA consultations and permitting requirements. The outcomes of these conservation efforts will serve as case studies and a basis for other pilot projects. Finally, NOAA will develop a performance measurement system in order to evaluate the success of the pilot's conservation efforts in decreasing the number of listed species.
 - **NOAA requests \$3,109,000 and 3 FTE to implement core protected species conservation and management activities.** Included is an increase of \$2,109,000 and 3 FTE to support ESA Section 7 consultations, programmatic NEPA reviews for ESA and MMPA permitting, mandatory ESA five-year status reviews, and reduced fishery interactions. This funding will allow the Protected Species Management program to “frontload” protected species issues into other management actions, feeding into a regional ecosystem management governance structure. In addition, an increase of \$1,000,000 will support Recovery Plan

development and implementation activities to increase NMFS' capacity to plan for and implement recovery actions for ESA-listed species. This funding will allow NMFS to complete plans for species that currently lack them, and to fund some of the highest priority actions needed to prevent extinction and start these species on the road to recovery.

- **Atlantic Salmon:** \$551,000 and 0 FTE in net increases above the base, for a total of \$5,881,000 and 12 FTE, are requested under the Atlantic Salmon line item of the Protected Species Research and Management subactivity. This request will be used to implement the Atlantic salmon recovery plan, including research and management activities within NMFS. The research initiatives and management activities that will start with the requested new funding will provide additional capacity and resources for managers to protect the Atlantic salmon stocks.
- **Pacific Salmon:** \$19,550,000 and 0 FTE in net increases above the base, for a total of \$66,591,000 and 193 FTE, are requested under the Pacific Salmon line item of the Protected Species Research and Management subactivity.
 - **NOAA requests an increase of \$11,000,000, a total of \$15,000,000 for research/monitoring/evaluation (RM&E) and recovery/subbasin planning as part of the implementation of the Federal Columbia River Power System (FCRPS).** The RM&E program provides scientific information necessary to assess achievement of the Biological Opinion (BiOp) performance measures. Certain actions are specified under BiOp to avoid jeopardy and begin rebuilding the anadromous fish resources of the Columbia River basin. The BiOp's success or failure will be judged according to the results of comprehensive monitoring for abundance, productivity, distribution, and diversity of listed salmon populations. The goal is to measure changes in habitat capacity, establish a link between habitat attributes and fish distribution, and track population growth rate and habitat trends. This initiative also ensures documentation and early alerts on progress toward performance measures. The funding request also will provide for needed research to address key uncertainties identified in the BiOp in the areas of estuary and near-shore ocean survival, delayed effects of dams passage, and the effects of hatchery programs on the productivity of naturally spawning fish.
 - **NOAA requests \$2,000,000 and 0 FTE to support Section 7 consultations in response to Environmental Protection Agency (EPA) Pesticide Court Decisions.** This increase will be used for necessary costs to meet court-ordered time lines to conduct ESA Section 7 consultations with EPA. Section 7 consultations are required by rulings on pesticide lawsuits in California, Oregon, Idaho, and Washington State. Other lawsuits are pending. NMFS can generally complete a draft biological opinion of average complexity in 135 days. However, because pesticide consultations are relatively new and often complex, NMFS estimates that initial development of draft biological opinions on pesticides may

take significantly longer. NMFS and EPA are conducting a pilot consultation to test EPA's risk assessment methodology, which is the foundation of the new EPA Section 7 Counterpart Regulations. To date, NMFS has received more than 500 requests for consultation from EPA on approximately 40 pesticides subject to the aforementioned litigation. NMFS anticipates reviewing at least 100 pesticides each year for EPA, per standard Section 7 procedures, the Counterpart Regulations, and other general technical assistance. Where appropriate, NMFS' concurrence on actions not likely to adversely affect ESA listed species and designated critical habitat will be incorporated into biological opinions with other pesticides to avoid the need to develop additional consultation documents.

- **NOAA requests an increase of \$6,550,000 for ESA status reviews and listings, critical habitat designation, recovery planning, Section 7 consultations, and Habitat Conservation Planning.** Efforts also include funding for research and technical support for analysis on factors affecting survival of at-risk salmon, evaluation of on-going conservation and habitat restoration efforts, and cumulative risk assessments. The requested funding will allow NOAA Fisheries to fulfill its mandates of completing and implementing recovery plans for species threatened and endangered with extinction. This new funding will strengthen the entire on-going management efforts currently in place for many species.



Step pool fish passage provides salmon and trout access through a culvert to upstream spawning grounds

Fisheries Research and Management

\$294,000,000

A net increase of \$13,645,000 and 22 FTE above the base is requested in the Fisheries Research and Management subactivity, for a total of \$294,000,000 and 1,444 FTE.

- **Fisheries Research and Management Programs:** \$1,035,000 and 0 FTE in net increases above the base, for a total of \$127,831,000 and 1,360 FTE, are requested under the Fisheries Research and Management Programs line item of the Fisheries Research and Management subactivity.
 - **NOAA requests an increase of \$440,000 and 0 FTE to reduce harvesting overcapacity in commercial fisheries.** In FY 2006, NMFS will partner with the fishing industry to conduct a voluntary permit buyback program in the

commercial sector of the Atlantic pelagic longline swordfish fishery. The cost of reducing the current number of permits in this fishery from 180 to approximately 117 will be \$18,900,000. This reduction will achieve an appropriate balance between resource availability and harvesting capacity in this fishery and also help reduce the number of interactions between pelagic longline gear and endangered species of sea turtles.

NOAA proposes that the entire cost of this program be paid for through a long-term loan to permit holders who remain in the fishery under fishing capacity reduction program procedures specified in sections 312(b)-(e) under the Magnuson-Stevens Fishery Conservation and Management Act. If approved in a referendum of eligible permit holders, the loan will be issued under the Fishery Finance Program and will be repaid through an assessment on ex-vessel payments to remaining permit holders for landed swordfish. These assessments will be collected at point of first sale. The Federal Credit Act or subsidy cost of this loan, which must be appropriated, is estimated to be \$60,000 and is reflected in the Fisheries Finance Program account. The \$440,000 requested here will be used for detailed program planning, development, and execution of the swordfish buyback programs as well as planning for future programs in other fisheries.

- **NOAA requests an increase of \$595,000 for a total of \$3,095,000 for Regulatory Streamlining.** The request includes an increase to improve the quality and timeliness of regulatory processes and policy development for the Fishery Management Program. These funds will be used to support national oversight and agency-wide integration at NMFS headquarters and regional oversight and technical assistance at the field level. These funds will enable NOAA to more fully assist in the development, review, and implementation of Regional Fishery Management Council proposed actions and assist in the analysis, evaluation, and implementation efforts of NMFS regional offices. Also included is an increase to develop and maintain an electronic rulemaking system and associated databases. This increase will shorten the time to review and process rules and regulations, increase public participation, and generate long-term cost savings to the government. In addition, the requested increase would implement an electronic permitting system for fisheries and protected species that will allow applicants to obtain routine renewals and some first-time permits via the Internet.
- **Expand Annual Stock Assessments—Improve Data Collection:** \$4,597,000 and 8 FTE in net increases above the base, for a total of \$25,397,000 and 59 FTE, are requested under the Expand Annual Stock Assessments—Improve Data Collection line item of the Fisheries Research and Management subactivity. Additional resources will help address longstanding shortfalls in fisheries science, fishery monitoring, and fisheries data management capabilities identified by internal and external NOAA review panels. FY 2006 funds will support new assessment FTEs,

contract staff, and external academic and state partners so that more and better data may be collected and processed from NMFS resource surveys and from the commercial and recreational fisheries. Also addressed is the need for information technology development to improve the integration and management of fishery-independent and fishery-dependent data.

- **Economics and Social Sciences Research:** \$5,518,000 and 14 FTE in net increases above the base, for a total of \$9,618,000 and 25 FTE, are requested under the Economics and Social Sciences Research line item of the Fisheries Research and Management subactivity. This funding will enable NOAA to expand its economic and social science data collection capabilities. Researchers will be able to estimate the economic impact of fishing on the local, state, and national economies, as well as assess the human impacts from and responses to management decisions. The Magnuson-Stevens Act mandates NOAA to consider the effects of regulations on the fishing industry and on fishing communities.

Comprehensive analysis of economic and socio-cultural factors supports effective ecosystem-based management of marine resources and enables decision-makers to identify cost-effective approaches for achieving conservation goals while reducing the risk of court challenges.

With these resources, NOAA expects to: 1) complete economic analyses on commercial harvesters for 26 Fisheries Management Plans (FMP) by FY 2006 -- a 46% increase over FY 2005 projections; 2) complete profiles on 20 fishing communities -- a three-fold increase from FY 2005; and 3) estimate economic impacts on recreational and commercial fisheries from effort displacement in 20 federal marine managed areas -- also a three-fold increase from FY 2005. The increase in funding will enable NOAA to achieve 100% of all economic and social data collection performance goal targets by FY 2008.

- **Regional Councils and Fisheries Commissions:** \$1,305,000 and 0 FTE in net increases above the base, for a total of \$25,946,000 and 0 FTE, are requested under the Regional Councils and Fisheries Commissions line item of the Fisheries Research and Management subactivity. This increase will expand the capacity of the eight Regional Fishery Management Councils (RFMCs) to provide for their full participation in the Regulatory Streamlining Projects. This funding (through annual grants to the RFMCs) will allow RFMCs to analyze a greater range of alternatives as they develop new or amend current Fishery Management Plans (FMPs) to reduce levels of overfishing and overcapacity while considering the impacts of proposed actions on other components of the marine ecosystem. Increased RFMC capabilities and implementation of the regulatory streamlining program will allow policy issues to be addressed early and efficiently in the regulatory review process, rather than later when it becomes difficult to comprehensively address a new issue. Without this funding, the RFMCs and NOAA will likely continue to face a significant number of

legal challenges to regulatory actions. NOAA will make \$1.0 million available for RFMCs to develop dedicated access privilege (DAP) programs, such as individual fishing quotas (IFQs). Development of DAP programs requires significant resources for economic analysis and design of programs for eligibility determination, permit issuance, and fishery monitoring. These funds would be made available on a competitive basis to support RFMCs with projects that advance DAP systems.

Enforcement and Observers/Training

\$80,163,000

A net increase of \$7,896,000 and 2 FTE above the base is requested in the Enforcement and Observers/Training subactivity, for a total of \$80,163,000 and 251 FTE.

- **Enforcement:** \$6,427,000 and 0 FTE in net increases above the base, for a total of \$54,171,000 and 188 FTE, are requested under the Enforcement line item of the Enforcement and Observer/Training subactivity.
 - **NOAA requests an increase of \$6,300,000 and 0 FTE for a total of \$9,300,000 for the Vessel Monitoring System (VMS).** This increase will support expanded use of vessel monitoring systems (VMS) for scientific and homeland security. VMS, which monitors vessel movement, is one of the most efficient mechanisms to improve NMFS' ability to monitor and enforce closed areas for protection of endangered species, critical habitat, and rebuilding and maintenance of sustainable fisheries. The number of vessels participating in this program is expected to continue to increase. The requested funding increase will maintain NMFS' ability to monitor vessel movement and respond effectively to potential and actual violations. Of this amount, \$4,800,000 is needed to support and maintain the existing infrastructure of the system. The remaining \$4,500,000 will cover the costs of purchasing and installing units on approximately 2,000 additional vessels.
- **Observers/Training:** \$1,469,000 and 2 FTE in net increases above the base, for a total of \$25,992,000 and 63 FTE, are requested under the Observers/Training line item of the Enforcement and Observer/Training subactivity. This level of funding will also enable NOAA to fully meet sampling design objectives in approximately three currently observed fisheries and initiate coverage in two additional fisheries to obtain preliminary estimates of catch and bycatch rates. This information will allow for development



NMFS Fishery Observer

and implementation of a statistically valid sampling design in these fisheries within three to five years. In addition, NOAA will deploy electronic monitoring (video cameras) in selected fisheries to supplement existing coverage, develop standards for hiring and training of observers, improve sampling design and analytical support, increase outreach to fishermen on observer program objectives and information collected, and publish summary reports of data collected. By the end of 2006, with the funds requested, NOAA will deploy observers in 43 fisheries, with adequate or near-adequate levels of observer coverage in approximately 29 of these fisheries.

Habitat Conservation and Restoration

\$34,096,000

A net decrease of \$2,039,000 and 0 FTE below the base is requested in the Habitat Conservation and Restoration subactivity, for a total of \$34,096,000 and 235 FTE.

- **Fisheries Habitat Restoration.** No increase from the base of \$15,298,000 and 3 FTE is requested under the Fisheries Habitat Restoration line item of the Habitat Conservation and Restoration subactivity.



NOAA volunteers restore herring runs in Massachusetts

NOAA will utilize \$1,500,000 and 3 FTEs of base resources to establish a Great Lakes Habitat Restoration Program, emphasizing protection and restoration of NOAA trust resources at the watershed scale within the Great Lakes Areas of Concern. NOAA's program will focus on restoring Great Lakes aquatic resources and will provide technical

support for commonly occurring lake-wide problems (e.g., invasive species, contaminated sediment and the presence of persistent contaminants, beach closings, and loss of high-quality fish and wildlife habitat).

The two primary components of the Great Lakes Restoration Program will be: 1) establishment of a cross-NOAA Great Lakes Habitat Restoration Program Office at NOAA's Great Lakes Environmental Research Laboratory (GLERL) and 2) coordination and funding for ecosystem-based, science-driven restoration projects that can be used to support the Great Lakes Interagency Task Force and the GLERL.

Other Activities Supporting Fisheries

\$57,932,000

A net increase of \$5,884,000 and 0 FTE above the base is requested in the Other Activities Supporting Fisheries subactivity, for a total of \$57,932,000 and 0 FTE.

- **Climate Regimes and Ecosystem Productivity:** \$500,000 and 0 FTE in net increases above the base, for a total of \$2,000,000 and 0 FTE, are requested under the Climate Regimes and Ecosystem Productivity line item of the Other Activities Supporting Fisheries subactivity. These funds will be used to improve the understanding and prediction of climate change on major U.S. marine and coastal ecosystems in the Bering Sea and Gulf of Alaska. This initiative will study the effects of climate change on North Pacific coastal and marine ecosystems, their living marine resources, and human communities. NMFS will use its expertise in biological oceanography and fisheries and pursue sociological studies on effects of climate change on fishing-dependent coastal communities.
- **National Environmental Policy Act (NEPA):** \$4,997,000 and 0 FTE in net increases above the base, for a total of \$7,997,000 and 0 FTE, are requested under the National Environmental Policy Act (NEPA) line item of the Other Activities Supporting Fisheries subactivity. These funds would be used primarily to support existing NEPA specialists within regional and headquarters offices. Almost all regional offices, as well as headquarters, continue to need more NEPA specialists to accommodate our growing NEPA workload. The NEPA Coordinators frequently identify program actions requiring new or more comprehensive NEPA analyses than have previously been conducted. Additionally, the Agency's ecosystem-based approaches to management will increase our need for NEPA expertise, given the analytical complexity of this management task. Because many of our financial assistance and permitting actions are frequently initiated by headquarters components, we continue to have an unmet need for more NEPA staff within these headquarters programs. Almost half of the requested \$4,997,000 will be allocated to meeting regional and headquarters staffing needs.

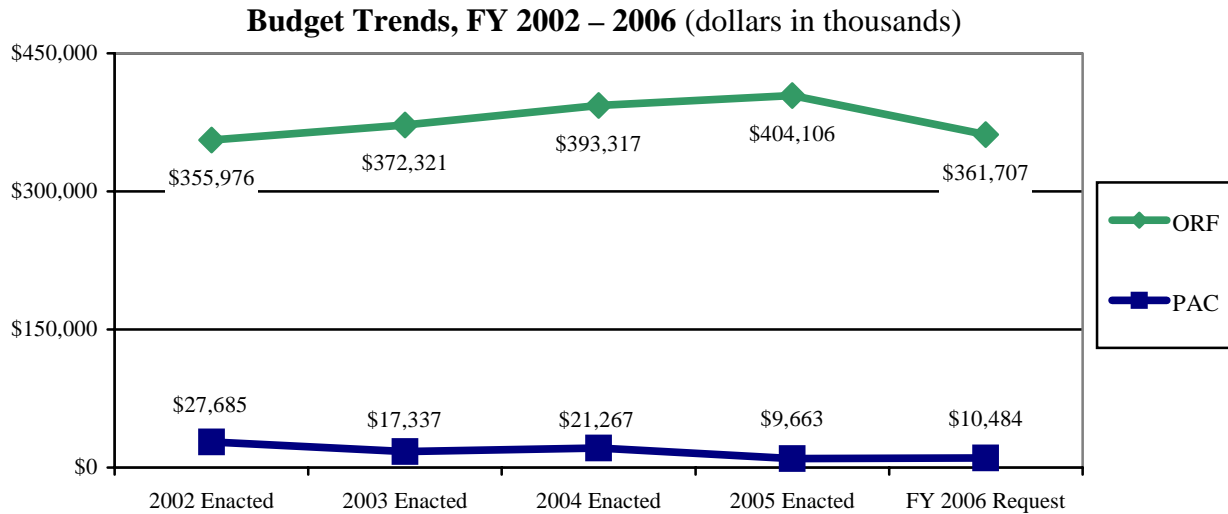
Funding would also be provided for the eight Regional Fishery Management Councils (FMC) to assist in implementing NEPA. By providing both fishery management expertise and staff assistance to produce our NEPA documents, the FMCs play a major role in our implementation of NEPA. We would continue our traditional support of this FMC role with approximately 15% of the total requested funds. We also would expand our NEPA training program to all staff with NEPA implementation responsibilities and tailor the training to those responsibilities.

NOAA's NEPA program offers a number of training courses for staff conducting NEPA analysis. Requested increases would support contractors hired on a multiyear basis to help design and conduct these courses. About 8% of the requested funds would be allocated for these expanded training efforts. In addition, about 27% of the requested funds would be used for contractor support to prepare high-priority, complex environmental impact statements (EIPs).



Office of Oceanic & Atmospheric Research

(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
Office of Oceanic & Atmospheric Research -- Operations, Research and Facilities (ORF)				
Climate Research	\$177,311	\$159,556	\$18,034	\$177,590
Weather and Air Quality Research	50,890	36,499	1,700	38,199
Ocean, Coastal, and Great Lakes Research	146,826	114,438	4,124	118,562
Information Technology, R&D, and Science Education	29,079	27,130	226	27,356
Total, Office of Oceanic & Atmospheric Research - ORF	404,106	337,623	24,084	361,707
Other Office of Oceanic & Atmospheric Research Accounts				
Total, Office of Oceanic & Atmospheric Research - PAC	9,663	9,500	984	10,484
Total, Office of Oceanic & Atmospheric Research - Other	0	0	0	0
GRAND TOTAL OFFICE OF OCEANIC & ATMOSPHERIC RESEARCH (Direct Obligations)	\$413,769	\$347,123	\$25,068	\$372,191
Total FTE	698	697	14	711



ORF: Operations, Research & Facilities
 PAC: Procurement, Acquisition & Construction



Office of Oceanic & Atmospheric Research



The primary focus for research and development within NOAA is the Office of Oceanic and Atmospheric Research (OAR), often referred to as NOAA Research. OAR conducts the scientific research, environmental studies, and technology development needed to improve NOAA's operations and broaden our understanding of the Earth's atmospheric and marine environmental systems. OAR currently consists of 11 internal research laboratories, and manages or facilitates extramural research at 30 National Sea Grant colleges, universities and research programs, 6 undersea research centers, a research grants program through the Office of Global Programs, and 13 cooperative institutes with academia.

OAR's activities are organized along four themes: (1) Climate Research; (2) Weather and Air Quality Research; (3) Ocean, Coastal and Great Lakes Research; and (4) Information Technology and Science Education. The goals of these four theme areas are to:

- Understand complex climate systems to improve predictions.
- Understand atmospheric events to assist in saving lives and property worldwide.
- Explore, investigate, and understand the complexities of all our coastal, Great Lakes, and ocean habitats and resources.

- Accelerate adoption of advanced computing, communications, and information technology throughout NOAA and support science education, expanding the pipeline of potential future environmental scientists and researchers for industry, academia, and government.

The research is carried out through a national network of 60 Federal laboratories and university-based research programs. With this diverse research “tool kit,” OAR:

- Provides national and international leadership on critical environmental issues and
- Addresses the environmental R&D needs of internal NOAA customers, states, industry, the Department of Commerce, and other Federal agencies.

OAR researchers represent the cutting edge in sustained, long-term environmental observations and modeling; their contributions enhance the health and economic well-being of society.

FY 2006 Budget Summary

NOAA requests a total of \$361,707,000 and 711 FTE to support the continued and enhanced operations of the Office of Oceanic & Atmospheric Research. The total includes \$3,961,000 for Adjustments to Base, \$24,084,000 for Program increases, and \$70,444,000 for Terminations.

ADJUSTMENTS TO BASE:

NOAA requests an increase of \$3,961,000 and a decrease of 1 FTE to fund adjustments to base for NOAA Research activities. The increase will fund the estimated FY 2006 Federal pay raise of 2.3 percent and annualize the FY 2005 pay raise of 3.5 percent. The increase will also provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration.

The above amount includes \$1,520,000 for amortized construction costs and net rent cost increases associated with the new National Weather Center on the South Campus of the University of Oklahoma. Based upon the February 2006 Beneficial Occupancy Date of the National Weather Center (NWC), NOAA will relocate its National Severe Storms Laboratory, Norman Weather Forecast Office, Storm Prediction Center, Warning Decision Training Branch and NEXRAD Radar Operations Center’s Application Branch to the NWC. The rent payments for FY 2006 will be \$234,000 per month or \$1,870,000 for 8 months of NOAA occupancy of the NWC. Current NOAA lease costs that can be applied to this new rental costs are \$520,000 a year (\$350,000 for the eight-month period of FY 2006) for a total net new requirement of \$1,520,000.

It also includes a base transfer of \$3,200,000 and 0 FTE from the Climate Change Research Initiative line item in OAR to NWS (Local Warnings and Forecasts line item) to reflect the successful transition from research to operations of the Tropical Atmosphere Ocean (TAO) buoy array; and a transfer of \$500,000 and 0 FTE to return U.S. Weather Research Program funding to NWS.

Finally, it includes transfers of \$40,000 to OMAO for partial funding of NOAA Corps Officer positions that benefit OAR. In addition, \$14,000 and 1 FTE are being realigned to the Office of General Counsel within Program Support.

OAR – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

NOAA requests a net increase of \$24,084,000 and 14 FTE over the FY 2006 base for a total request of \$361,707,000 and 711 FTE. These changes are summarized at the sub-activity level below. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2006 Technical Budget.

Climate Research \$177,590,000

A net increase of \$18,034,000 and 11 FTE above the base is requested in the Climate Research subactivity, for a total of \$177,590,000 and 352 FTE.

- **Climate Observations & Services:** \$18,034,000 and 11 FTE in net increases above the base, for a total of \$69,227,000 and 31 FTE, are requested under the Climate Observations & Services line item of the Climate Research subactivity.
 - **NOAA requests an increase of \$7,441,000 and 11 FTE to support activities under its Climate Research and Observations, Climate Operations, and Climate Data and Information programs** that are essential to the accomplishment of key NOAA missions. These programs are needed as the foundation for NOAA's participation in the interagency U.S. Climate Change Science Program by providing the base support fundamental to the success of activities conducted under the Climate Change Research Initiative.

Within this request, \$3,233,000 and 8 FTE will support Climate Research and Observations. This program includes research activities ranging from long-term monitoring of key climate variables to improved forecasts and more sophisticated applications of climate information to state-of-the-science assessments and information products. These activities are central to NOAA's provision of end-to-end climate services and products. The funding request would support full-time staffing of the Mauna Loa Observatory, as well as staffing support for the Barrow, Samoa, and South Pole Observatories. Funding would also enable continued

participation in the Dobson total ozone global network (includes 20 stations plus the WMO World Standard instrument used to calibrate about 80 global ozone-layer measurements) and ensure continuation of long-term climate monitoring of atmospheric properties critical to tracking changes in long-term trends (e.g., the 47-year records of atmospheric carbon dioxide at the Mauna Loa and South Pole Observatories), stratospheric ozone depletion, and surface radiation. These actions are critical for assessing the impacts of the Montreal Protocol and other remedial actions aimed at reducing stratospheric ozone depletion. Funding would also enable the eight current Regional Integrated Sciences and Assessments (RISA) teams to develop the decision support tools needed to better prepare for and mitigate the effects of drought as called for in the National Integrated Drought Information System plan. The implementation includes conducting applied research to develop these tools to solve drought related problems facing State officials in water, land, and ecosystem management, as well as fire mitigation strategies. This funding would also benefit the public and our environment through the dissemination of information products that serve our Nation's environmental decision makers, e.g., Intergovernmental Panel on Climate Change reports, WMO Ozone Assessments, and U.S. Climate Change Science Program synthesis and assessment products.



Mauna Loa observatory

Also within this request, \$895,000 and 1 FTE will support Climate Operations. The activities would provide the operational interface between users and developers of reliable climate products and services as well as support the effective transfer of new forecasting techniques to NWS to improve operational settings, particularly in the areas of short- and medium-range climate forecasts. For example, this funding would support the NOAA Climate Test Bed through the evaluation of NCEP's new Climate Forecast System, the development of multi-model ensembles for climate, model comparison activities with the Geophysical Fluid Dynamics Laboratory, and the development of new climate forecast applications. Finally, this program supports the application of improved climate information at local forecast offices and encourages its incorporation into everyday decision making at the community level. This is achieved through development and implementation of new regional and local climate products and

web based customer services.

In addition, \$3,313,000 and 2 FTEs will support Climate Data and Information. This effort seeks to make available the robust climate record and climate benchmarks needed to document long-term changes in climate (50-100 years). Specifically, the funding will enable NOAA to maintain 16 stations or 21% of the U.S. Climate Reference Network whose reference measurements of temperature and precipitation are critical to NOAA's development of an Integrated Surface Observing System, integrating both in-situ and satellite measurements along a common reference scale. In addition, the requested funding will enhance the Observing System Monitoring Program's ability to identify and communicate early warnings of network problems that can adversely affect our ability to track variations and changes in climate, which also are key to a fully functional integrated observing system. Finally, funding would provide NOAA the processing capability to merge data from NOAA, NASA, and other satellites, enabling scientists to track changes in global cloud cover, a currently fundamental uncertainty in understanding climate whose resolution is required for many energy-related applications.

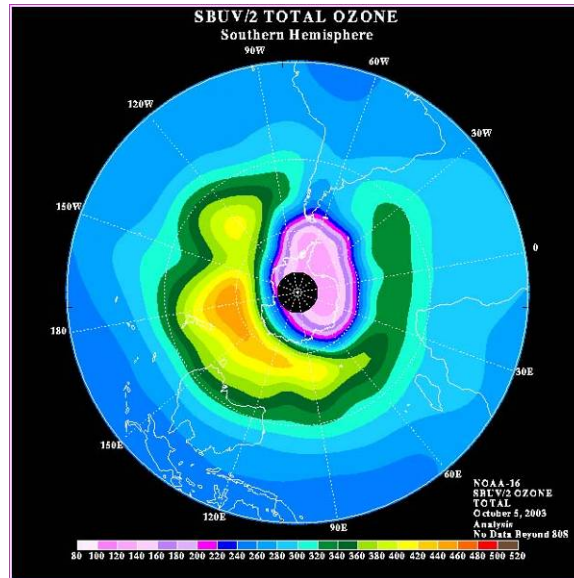
- **NOAA requests an increase of \$3,200,000 and 0 FTEs to conduct further research on the Tropical Atmosphere Ocean (TAO) array and the Pilot Research Moored Array in the Tropical Atlantic (PIRATA).** This funding will expand the TAO array into the Indian Ocean and support the technological development of the next generation of moored buoys. Both efforts will cost-effectively enhance TAO's capability to accurately document the state of ocean climatic conditions and improve our seasonal forecasting capability. NOAA will also add salinity sensors to the TAO array to improve seasonal-interannual (S/I) forecasting. In addition, system upgrades for 4 TAO and 3 PIRATA buoys will bring them up to ocean-reference-station quality for satellite and model validation. Finally, providing 4 additional buoys for the PIRATA array in the hurricane-genesis region of the Atlantic Ocean is critical to improved understanding of the effects of ocean-atmosphere interactions on hurricane development.
- **NOAA requests \$2,000,000 and 0 FTE to develop new climate reanalysis data sets that will enable us to explain more adequately the causes for observed climate variability and change.** This effort represents a key NOAA contribution to the interagency U.S. Climate Change Science Program (CCSP) goal of improving knowledge of the Earth's past and present climate and environment, including its natural variability, and improving understanding of the causes of observed variability and change. These datasets will substantially reduce current uncertainty about historical climate variations and improve our ability to analyze and detect interannual-to-decadal variability and weather-climate trends for the 20th century (vs. current capacity to do so for just the second half of the 20th

century). Finally, OAR climate attribution research will greatly improve our ability to interpret causes of observed climate variability and, thereby, provide policy-makers with critically needed explanations of current and future regional climate conditions, including major droughts, floods, prolonged warm or cold conditions, climate trends and extremes, and multi-decadal variability.

- **NOAA requests an increase of \$800,000 and 0 FTE for the Regional Integrated Sciences and Assessments (RISA) program.** This funding will initiate a multi-year research effort to: (1) refine existing regional integrated research and address new issues of importance to decision-making communities in regions currently served; (2) link, in an integrated manner, climate research and information to decision-making processes in regions not currently supported by NOAA to ensure NOAA is providing effective climate services across the Nation; and (3) increase research capacity to address climate-sensitive issues of importance to NOAA's constituents at spatial scales that transcend the current regional foci (e.g., Colorado River system and national drought management issues). The funding will also support a new RISA team in a region that demonstrates a need for applied climate research to improve operational products and policies. These will support research in such NOAA mission areas as improved wildfire forecasting and response; water systems management; enhanced agricultural management; improved vulnerability assessment and management option development; and continued applied research on climate-related health issues, e.g., West Nile Virus, Hanta Virus, and respiratory ailments.

- **NOAA requests an increase of \$3,515,000 and 0 FTE to continue building and maintaining a global ocean observing system, (which will be a component of the planned Integrated Ocean Observing System) that will accurately document climate-scale changes in ocean heat, carbon, and sea level.** This effort will complete 55% of the ocean observing system, keeping us on track with our international commitment of completing the ocean climate observing system by 2010. Improvements to the system will focus on: (1) reducing uncertainty in estimating sea-level change, sea-surface temperature, and changes in the global ocean carbon inventories; (2) documenting/tracking changes in how the ocean stores heat energy, a key driver of long-term climate variability and change; and (3) monitoring the ocean's role in the global freshwater cycle (by deploying additional sensors for sea-surface salinity, an indicator of air-sea exchange of freshwater via evaporation and precipitation). Expansion of the ocean observing system will ultimately enable society to better anticipate and respond to changes in the Earth's climate system, through improved observations of oceanic indicators of climate change and more accurate initial conditions for seasonal climate forecasts.

- **NOAA requests an increase of \$2,078,000 and 0 FTE for expanded research efforts in Aerosols, Clouds, and Climate Change: Observations and Predictions.** This research effort is part of a multi-year program of observations to quantify how aerosols (airborne fine particles) influence climate change by their interactions with clouds. The observations will be used to test, validate, and improve aerosol-cloud and global climate models so that they more accurately represent aerosol-cloud interactions. Specifically, funding for this research will support: (1)



Ozone hole over South Pole

observation-based determinations of the effect of aerosols on cloud brightness during FY 2006 field studies over oceans close to the U.S. and a continental site in the Eastern U.S.; (2) quantifying basic processes involved in aerosol effects on clouds (by studies under controlled laboratory conditions and over surface sites) to gather information that will improve the models' predictive capability; (3) building a detailed model of the microphysics and aerosol-cloud-radiation interactions using information gained in the studies in tasks (1) and (2); and (4) incorporating aerosols' impact on climate in global climate models and comparing model results with observations to improve the models' performance. The result will be an improved capability to simulate global and regional climate change and determine the roles of various aerosols in this change. This will assess/improve the reliability of future climate projection scenarios associated with anthropogenic activity done for CCSP and the Intergovernmental Panel on Climate Change (IPCC) as well as help craft the next generation of decision-support needs.

Weather and Air Quality Research

\$38,199,000

An increase of \$1,700,000 and 0 FTE above the base is requested in the Weather and Air Quality Research subactivity, for a total of \$38,199,000 and 180 FTE.

- **Laboratories & Joint Institutes:** \$1,700,000 and 0 FTE increase above the base, for a total of \$37,197,000 and 178 FTE, are requested under the Laboratories & Joint Institutes line item of the Weather and Air Quality Research subactivity.



Houston skyline on hazy day

- **NOAA requests an increase of \$1,700,000 and 0 FTE for an Air Quality regional assessment that will characterize key atmospheric processes that drive air pollution problems in east Texas.** The centerpiece of this effort is a comprehensive month-long field experiment that will measure many aspects of weather and air quality. OAR will build on the results of the previously conducted Texas 2000 regional assessment to provide a comprehensive characterization of the key processes that drive air pollution in that region. In particular, NOAA will extend the assessment activities to include a comprehensive study of the sources and processes responsible for the emission, atmospheric formation, growth, and transport of particulate matter (PM). The field study will include detailed measurements of weather and air quality at the surface and aloft. Air quality measurements will include concentrations and composition of particles and precursor species. The FY 2006 funding supports development and field testing of improved observing techniques for PM, preparation for the field study, and initial evaluation of the results. In later years, NOAA will continue to evaluate the results and communicate them to stakeholders.

This work is part of a series of assessments that provide both general and region-specific information to air quality decision-makers, including policy-makers at all levels of government, enabling them to develop plans that protect both public health and economic vitality. NOAA's assessments also provide essential

information for improving and evaluating numerical models of air pollution that are used to predict unhealthful conditions and evaluate potential policies. The regional assessment will be a collaborative effort among multiple institutions, including NOAA Laboratories (administered by the Aeronomy Laboratory), Office of Marine and Aircraft Operations, NOAA joint institutes, the U.S. Environmental Protection Agency (EPA), the State of Texas, and university grantees.

Ocean, Coastal, and Great Lakes Research

\$118,562,000

An increase of \$4,124,000 and 3 FTE above the base is requested in the Ocean, Coastal, and Great Lakes Research subactivity, for a total of \$118,562,000 and 166 FTE.

- **NOAA requests no increase for a total of \$61,208,000 and 23 FTE for the National Sea Grant College Program.** This sustains the program at approximately the level in the FY 2005 appropriation. Sea Grant is developing a system of regional networks that allows for organizing multi-state responses to regional/ecosystem-level problems. This effort supports a key Ocean Commission recommendation that NOAA move to a regional ecosystem management approach and develop information plans to coordinate ocean and coastal activities in each region. NOAA is in the process of defining regional ecosystem boundaries to implement this recommendation. Sea Grant will use its extensive working relationships at the state and local level to facilitate NOAA's development of regional priorities by expanding the research and information planning efforts initiated in FY 2005 to include three additional regions. As the regional ecosystem information plans are developed, Sea Grant research, education, extension, and outreach will be targeted at the priority actions identified in those plans. This new regional focus will enhance Sea Grant's ability to make a critical contribution to this NOAA effort.
- **NOAA requests no increase for a total of \$22,693,000 and 11 FTE for the Ocean Exploration Program.** This sustains the program at approximately the level in the FY 2005 appropriation. This program seeks to increase our national understanding of unknown or poorly known ocean systems and processes by conducting 25-30 expeditions per year. In addition, the program spends ten percent of all funds for education and outreach to improve ocean literacy in America and to stimulate student interest in ocean science. The data and information from these cruises are made available to all researchers and the general public on our award winning website www.oceanexplorer.noaa.gov. The majority of the research on these expeditions is carried out by external partners. Accordingly, the program spends the majority of its funds on science and education activities conducted by non-NOAA personnel to enhance NOAA's and our Nation's understanding of the deep oceans and ocean ecosystems. In FY 2005, a portion of the increased OE base is being used to purchase a remotely operated vehicle (ROV) and other infrastructure for NOAA's first

designated exploration vessel, scheduled for sea trials in FY 2007. With this infrastructure completed, FY 2006 base funds will support an expanded set of expeditions and projects selected through a peer-reviewed process.

- **Other Ecosystems Programs:** \$4,124,000 and 3 FTE in increases above the base, for a total of \$4,124,000 and 3 FTE, are requested under the Other Ecosystems Programs line item of the Ocean, Coastal, and Great Lakes Research subactivity.

- **NOAA requests an increase of \$2,502,000 and 2 FTE for its Aquatic Invasive Species (AIS) Program.** This augmentation represents a strategic decision by NOAA to develop the critical mass needed to address a growing worldwide threat. Zebra mussels have cost the Great Lakes region \$3 billion over the past decade. These are only one out of hundreds of aquatic invasive species affecting the U.S. The current budget for this program is insufficient to cover multiple requirements including monitoring, control, education and research to prevent new introductions, as mandated by the National Invasive Species Act (NISA) [reauthorization as the National Aquatic Invasive Species Act (NAISA)], the National Sea Grant College Program Act of 2002, and Executive Order 13112, “Invasive Species” (1999). NOAA needs to



Zebra mussels

continue to implement the national program to finalize survey methods and sampling protocols, to add regions to the Early Warning System for Aquatic Invasive Species Introduction, to complete additional aquatic species baseline assessments, and enhance control activities of established populations of species that are determined to be high concern. The Department of Commerce also supports the interagency Aquatic Nuisance Species Task Force and National Invasive Species Council with NOAA as co-chair of both. The NOAA AIS Program is part of a crosscutting budget initiative involving eight other Federal agencies and is a cooperative effort between NOAA Research, the National Ocean Service, and the National Marine Fisheries Service.

- **NOAA requests an increase of \$1,622,000 and 1 FTE for its Marine Aquaculture Program.** This increase will reactivate NOAA’s cutting-edge research operations and activities in aquaculture to: spur environmentally safe domestic marine aquaculture production, helping to offset the current \$7 billion annual U.S. trade deficit in seafood; rebuild wild fisheries stocks; and enhance job creation in both the production and processing of fishery products, thereby revitalizing communities devastated by collapsing fisheries industries. The NOAA Marine Aquaculture Program will be a national leader in growing the U.S. marine aquaculture industry through its integration of research, education, and technology transfer focused on key scientific, engineering, environmental, and socioeconomic issues that currently inhibit this emerging industry. The requested funds will be used to run NOAA’s annual national competition to develop new offshore aquaculture research, enhance wild fisheries stock programs, and develop and transfer re-circulating aquaculture systems to an operational mode. The increase will strengthen aquaculture research in three of the five regions where partnerships between NOAA and the external community have already been established. NOAA’s aquaculture education and extension network will be maintained, facilitating the transfer of research into business operations as well as informing the public and practitioners about key issues and information related to aquaculture. This increase will fund the highest-priority research proposals and involve multiple NOAA partners in an effort to grow our domestic seafood production while we rebuild and sustain our wild fisheries.

Information Technology, R&D, and Science Education **\$27,356,000**

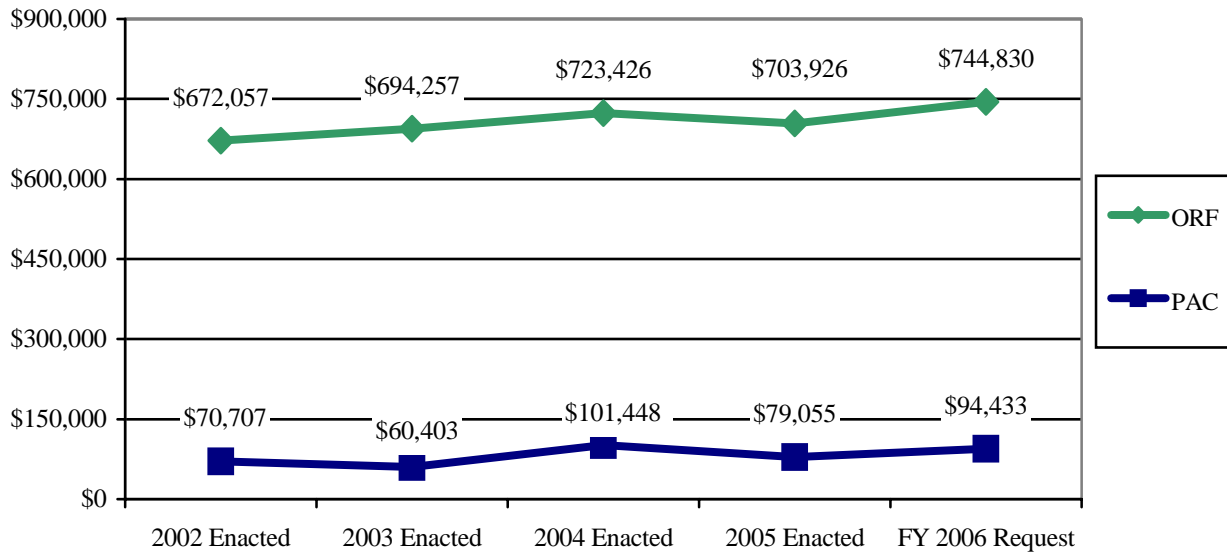
An increase of \$226,000 and 0 FTE above the base is requested in the Information Technology, R&D, and Science Education subactivity, for a total of \$27,356,000 and 13 FTE.



National Weather Service

(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
National Weather Service -- Operations, Research and Facilities (ORF)				
Operations and Research	\$617,189	\$634,277	\$18,010	\$652,287
Systems Operation & Maintenance (O&M)	86,737	89,607	2,936	92,543
Total, National Weather Service - ORF	703,926	723,884	20,946	744,830
Other National Weather Service Accounts				
Total, National Weather Service - PAC	79,055	79,887	14,546	94,433
Total, National Weather Service - Other	0	0	0	0
GRAND TOTAL NATIONAL WEATHER SERVICE (Direct Obligations)	\$782,981	\$803,771	\$35,492	\$839,263
Total FTE	4,654	4,651	0	4,651

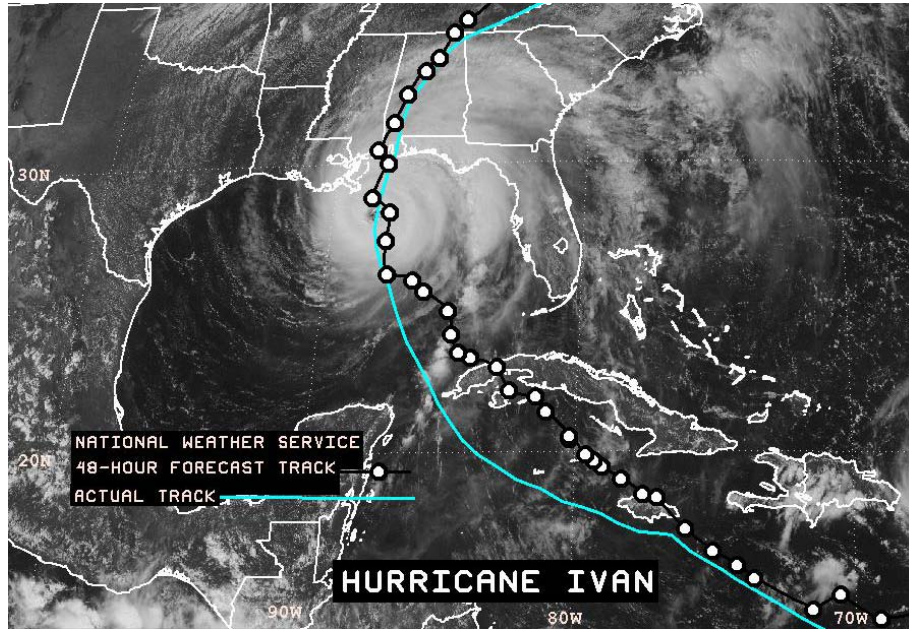
Budget Trends, FY 2002 – 2006 (dollars in thousands)



ORF: Operations, Research & Facilities
 PAC: Procurement, Acquisition & Construction



National Weather Service



The National Weather Service (NWS) provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters, and ocean areas for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other government agencies, the private sector, the public, and the global community.

The United States is one of the most severe-weather prone countries on Earth. Each year, Americans cope with an average of 10,000 thunderstorms, 2,500 floods, 1,000 tornadoes, as well as 6 deadly hurricanes. Some 90% of all Presidentially-declared disasters are weather related, causing approximately 500 deaths per year and \$11 billion in damage. According to the American Meteorological Society, weather is directly linked to public safety and about one-third of the U.S. economy (about \$3 trillion) is weather sensitive.

More and more sectors of the U.S. economy recognize the impacts of weather, water, and climate on their businesses, and are becoming more sophisticated at using weather, water, and climate information to make better decisions. To meet this growing demand for information and to improve the timeliness and accuracy of warnings for all weather-

related hazards, the NWS will continue to enhance observing capabilities, improve data assimilation to use effectively all the relevant data NWS and others collect, improve collaboration with the research community, make NWS information available quickly, efficiently, and in a useful form (e.g., the National Digital Forecast Database) and include information on forecast uncertainty to help customers make fully informed decisions.

With about 4,700 employees in 122 weather forecast offices, 13 river forecast centers, 9 national centers and other support offices around country, NWS provides a national infrastructure to gather and process data worldwide from the land, sea, and air. This infrastructure enables data collection using technologies such as Doppler weather radars, satellites operated by NOAA's National Environmental Satellite, Data, and Information Service (NESDIS), data buoys for marine observations, surface observing systems, and instruments for monitoring space weather and air quality. These data feed sophisticated environmental prediction models running on high-speed supercomputers. Our highly trained and skilled workforce uses powerful workstations to analyze all of these data to issue climate, public, aviation, marine, fire weather, air quality, space weather, river and flood forecasts and warnings around-the-clock. A high-speed communications hub allows for the efficient exchange of these data and products between NWS components, partners and customers. NWS forecasts and warnings are rapidly distributed via a diverse dissemination infrastructure including NOAA Weather Radio. Finally, customer outreach, education, and feedback are critical elements to effective public response and improvements to NWS services.

The FY 2006 President's Budget Request supports the funding and program requirements necessary to address established NOAA strategic goals and sets NWS on a path to achieve its vision: Produce and deliver forecasts that can be trusted; use cutting-edge technologies; provide services in a cost-effective manner; strive to eliminate weather-related fatalities; and improve the economic value of weather, water, and climate information.

FY 2006 Budget Summary

NOAA requests total of \$744,830,000 and 4,597 FTE to support the continued and enhanced operations of the National Weather Service. The total includes \$33,433,000 for Adjustments to Base, \$20,946,000 for Program increases, and \$13,475,000 for Terminations.

ADJUSTMENTS TO BASE:

NOAA requests an increase of \$33,433,000 and a decrease of 3 FTE to fund adjustments to base for National Weather Service activities. The increase will fund the estimated FY 2006 Federal pay raise of 2.3 percent and annualize the FY 2005 pay raise of 3.5 percent. The increase will also provide inflationary increases for non-labor activities, including

service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

The above amount includes several transfers:

- \$3,200,000 to reflect the transition of the TAO-Array from NOAA Research to an operational mode in the National Weather Service. This buoy array, located in the Pacific Ocean, provides real-time in-situ data from the tropical Pacific Ocean for monitoring, prediction, and improved understanding of El Niño. Having demonstrated its viability as a research activity, NOAA seeks to transfer the array into operations. NWS is best position to operate and maintain the array.
- \$500,000 from OAR to return funding for the U.S. Weather Research Program to NWS.
- \$7,390,000 from Program Support, Facilities Maintenance to fund WFO maintenance in NWS, where it has traditionally been appropriated.
- \$20,000 to OMAO for partial funding of a NOAA Corps Officer position that benefits NWS.
- \$37,000 and 3 FTE to the Office of General Counsel within Program Support.

NWS – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

NOAA requests a net increase of \$20,946,000 and 0 FTE over the FY 2006 base for a total request of \$744,830,000 and 4,597 FTE. These changes are summarized at the sub-activity level below. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2006 Technical Budget.

Operations and Research **\$652,287,000**

A net increase of \$18,010,000 and 0 FTE above the base is requested in the Operations and Research subactivity, for a total of \$652,287,000 and 4,415 FTE.

- **Local Warnings and Forecasts:** \$14,975,000 and 0 FTE in net increases above the base, for a total of \$602,395,000 and 4,116 FTE, are requested under the Local Warnings and Forecasts line item of the Operations and Research subactivity.

- **NOAA requests \$5,970,000 and 0 FTE to strengthen the U.S. tsunami warning program.** Lessons learned from the 2004 Indian Ocean Tsunami indicate that to mitigate a similar event in the U.S., the following actions are required: 1) quickly confirm potentially destructive tsunamis and reduce false alarms; 2) address local tsunami mitigation and the needs of coastal residents; 3) improve coordination and exchange of information to better utilize existing resources; and 4) sustain support at state and local level



TsunamiReady Community information and warning sign

for long-term tsunami hazard mitigation. This funding will be used to begin the planned deployment of the 32 deep ocean assessment and reporting of tsunamis (DART) buoys for the Pacific Ocean Basin and the Caribbean/Atlantic Ocean region, next generation DART buoy research and development, and for upgrades and operations and maintenance of sea level monitoring sensors. Funds will also be used to provide for 24/7 operations at the Richard H. Hagenmeyer Pacific Tsunami Warning Center (PTWC), the West Coast/Alaska Tsunami Warning Center (WC/ATWC), upgrade the operations of the NWS International Tsunami Information Center (ITIC), and to expand the U.S. TsunamiReady Community efforts on the East and West Coasts.

- **NOAA requests \$4,000,000 and 0 FTE to begin efforts to develop a nationwide water resources forecasting capability.** Through this capability, NOAA will provide America with economically valuable water and soil condition forecasts via: 1) a national digital database incorporating assimilation of all available hydro-meteorological data and observations; and 2) a community hydrologic prediction system (CHPS) necessary to advance water prediction science. This will allow NOAA's research and development enterprise and operational service delivery infrastructure to be integrated and leveraged with other federal water agency activities to form the basis of a national backbone water information system. The initiative provides the water modeling capability to support the U.S. Commission on Ocean Policy mandate for a national water quality monitoring and prediction system. Furthermore,



Drought in U.S. southwest

the initiative enables NOAA to deliver a national database of drought analyses and predictions, and generate user friendly GIS products for monitoring drought. The initiative will provide water users – farmers, utilities, land managers, business owners, and decision makers – the ability to assess water availability in real time and make informed decisions to mitigate impacts of extreme water events, e.g., droughts.

This initiative is expected to provide a return of \$12 annually for each \$1 invested due to improved decisions associated with irrigation scheduling and water supply management (National Hydrologic Warning Council, May 2002). NOAA's NWS is the only federal entity positioned to lead this activity because of its unique capabilities in data acquisition and processing, existing operational water modeling infrastructure, and robust national service delivery system to provide predictions of water resource variables for forecast periods of hours to months.

- **NOAA Requests \$2,072,000 and 0 FTE, for a total of \$6,790,000 to accelerate nationwide implementation of ozone air quality (AQ) forecasting capability from FY 2009 to FY 2008 and to deliver an initial particulate matter forecasting capability by FY 2011.** Of the increase requested, \$1,290,000 is requested in the U.S. Weather Research Program and \$782,000 is requested in the Air Quality Forecast program, for a total of \$1,290,000 in the U.S. Weather Research Program and \$5,500,000 in the Air Quality Forecast program. The effect of poor air quality on the national economy is estimated at \$150 billion/year from health effects alone. Accurate air quality forecast guidance, provided in time to take action, can lead to significant savings in these costs. For example, if the public has advance warning of the onset of poor air quality conditions, mitigating actions can be taken, such as not jogging or engaging in other outdoor activity. NWS and OAR are working closely together to develop and deliver these new capabilities. This funding will accelerate benefits to the public. Accelerating deployment of particulates predictions will provide, one year earlier than currently planned, the information needed for people to take protective actions against a significant health risk – a risk that is especially harmful for those with cardiac and respiratory ailments.
- **NOAA Requests and additional \$1,115,000 for the U.S. Weather Research Program (above the amount requested to accelerate AQ forecasting – see above) and 0 FTE for a total of \$7,457,000 to accelerate improvements in global weather forecasting and accelerate hurricane and other high-impact weather research activities.** This increase will restore funding to the U.S. Weather Research Program (USWRP) and The Observing-system Research and Predictability EXperiment (THORPEX) requested in FY 2005. Key activities directed to hurricane forecasting and research include development, testing, and transition to operations of the hurricane weather research and forecasting (HWRF) community model that promises to significantly improve predictions of the

intensity and precipitation of hurricanes at landfall. Other activities include testing and development of promising hurricane research at the Joint Hurricane Testbed, which can be adopted to improve warnings and forecasts by operations centers and numerical assimilation of tropical cyclone data for use in numerical weather prediction models.

- **NOAA requests an increase of \$1,100,000 and 0 FTE for a total of \$3,500,000 to continue a 10-year plan to improve U.S. aviation safety and economic efficiencies by providing state-of-the-art weather observation and forecast products responsive to aviation user needs.** This increase will allow the NWS to procure, install and operate 50 aircraft based water vapor data systems. Water vapor information is critical



Deicing an aircraft - Unnecessary deicing is a costly proposition for the transportation industry -- photo courtesy BBC

to depicting weather hazards and reducing forecast errors. This initiative addresses Federal Aviation Administration (FAA) joint safety implementation team (JSIT) recommendations and provides a means for NWS to improve its aviation weather forecast services through three major efforts: 1) increase the number and quality of aviation weather observations; 2) transition successful NOAA, NASA and FAA applied research efforts to operational products; and 3) develop and implement new training programs for forecasters, pilots, and controllers. The aviation program has the FY 2012 goal of a 10% reduction in National Airspace System (NAS) weather-related air traffic delays, which would save \$1 billion annually in potential economic losses, while also reducing general aviation weather related fatalities by 25% or 50 lives annually. The Airline Transport Association estimates \$10 billion lost to the U.S. economy each year due air-traffic delays.

- **NOAA requests an increase of \$298,000 and 0 FTE for a total of \$6,098,000 for the Advanced Hydrologic Prediction Service (AHPS).** AHPS is NOAA's program to modernize the river forecasting capability and expand it to new waterways. This increase will restore funds requested in FY 2005. With full funding for FY 2006, AHPS will provide enhanced river forecasts, including web accessible displays of probabilistic information, for 308 additional locations throughout the Southeast, South, and West. AHPS priorities are to sustain current

hydrological services, deliver more precise forecasts with magnitude and certainty of occurrence information, leverage collaborative research to infuse new science, and provide better water information to benefit the public and the Nation's commerce. Through AHPS, NOAA's National Weather Service will deliver better forecast accuracy; more specific and timely information on fast-rising floods; new types of forecast information; longer forecast horizons; easier to use products; increased, more timely, and consistent access to products and information and expanded outreach.

- **Central Forecast Guidance:** \$3,035,000 and 0 FTE in net increases above the base, for a total of \$49,892,000 and 299 FTE, are requested under the Central Forecast Guidance line item of the Operations and Research subactivity.
 - **NOAA requests \$1,000,000 and 0 FTE to fund focused research, development, and testing of advanced data assimilation algorithms and techniques.** Expected improvements include: development of advanced techniques in global and mesoscale atmospheric, ocean and land data assimilation systems; use of new satellite data from the National Polar-orbiting Operational Environmental Satellite System (NPOESS), the NPOESS Preparatory Project and European operational instruments; and increased use of high resolution surface and radar observations for initializing high resolution mesoscale forecasts. Current resources are insufficient to fully utilize current and future observations including radar and satellite data, and inadequate for finer resolution forecast applications. This investment has the potential to provide breakthroughs in storm track prediction performance, as well as increasing the realism of all parts of the systems and improving forecast accuracy across the board. Outcomes include improved winter storm warnings, precipitation forecasts, and lead-times for flash flood and Red Flag warnings.
 - **NOAA requests \$2,035,000 and 0 FTE to provide for the cyclic replacement of information technology (IT) infrastructure at the National Centers for Environmental Prediction (NCEP)** in order to enable the effective use of increasing volumes of model guidance, imagery and observational data and to comply with IT security requirements and related challenges which are projected to increase through the FY06 – FY07 timeframe. By FY06, current resources devoted to NCEP IT cyclic replacement will be insufficient to meet projected data volume demands related to ensemble model systems for weather and climate forecasts and the expanding suite of ocean and coastal model forecasts. The IT cyclic replacement program for operational systems will entail replacement of PCs, workstations, servers, and operating systems to meet data volume demands and ensure against interference from hackers and denial of service attacks.

Systems Operation & Maintenance (O&M)

\$92,543,000

A net increase of \$2,936,000 and 0 FTE above the base is requested in the Systems Operation & Maintenance subactivity, for a total of \$92,543,000 and 182 FTE.

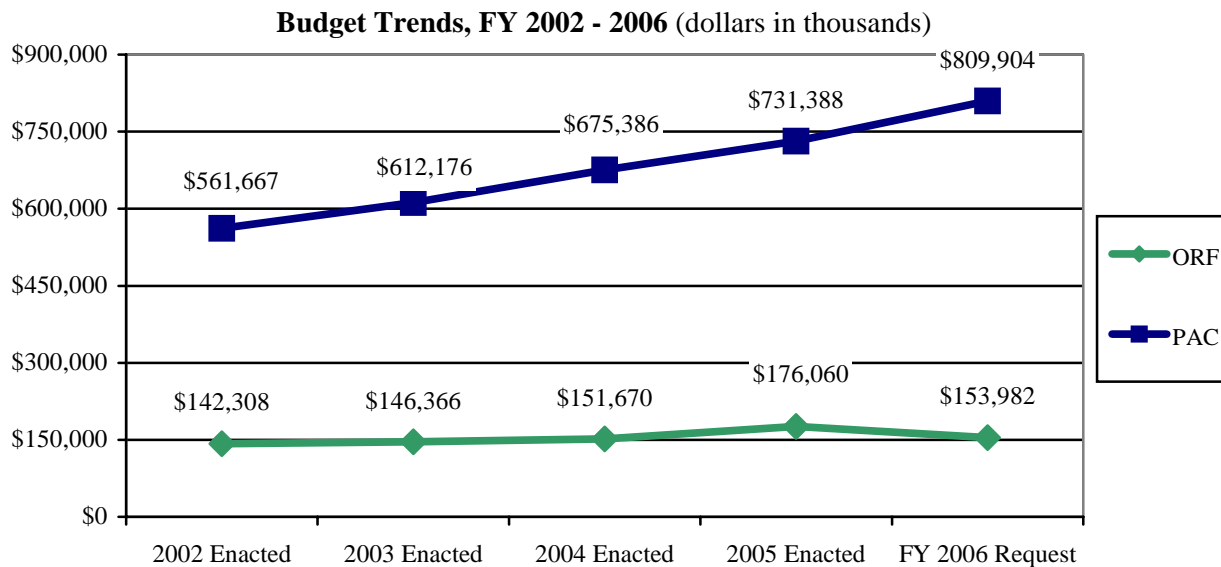
- **NOAA requests an increase of \$2,936,000 and 0 FTE for a total of \$43,367,000 for NEXRAD Operations and Maintenance.** NEXRAD is the cornerstone of the NWS Modernization and this increase will restore funds requested in FY 2005 for operations and maintenance of the NEXRAD system. Specifically, the requested increase will allow the NWS to implement planned retrofits to WSR-88D communications lines (copper to fiber optic) at 8 sites where deteriorating copper lines make communications unreliable, thus creating a moderate to high risk of communications failure and lost radar data (particularly during severe weather events). Furthermore, NWS will be able to perform planned radar radome and tower maintenance, eliminating the risk of catastrophic radar failure due to lack of structural integrity.

[Page intentionally left blank]



National Environmental Satellite, Data, and Information Service

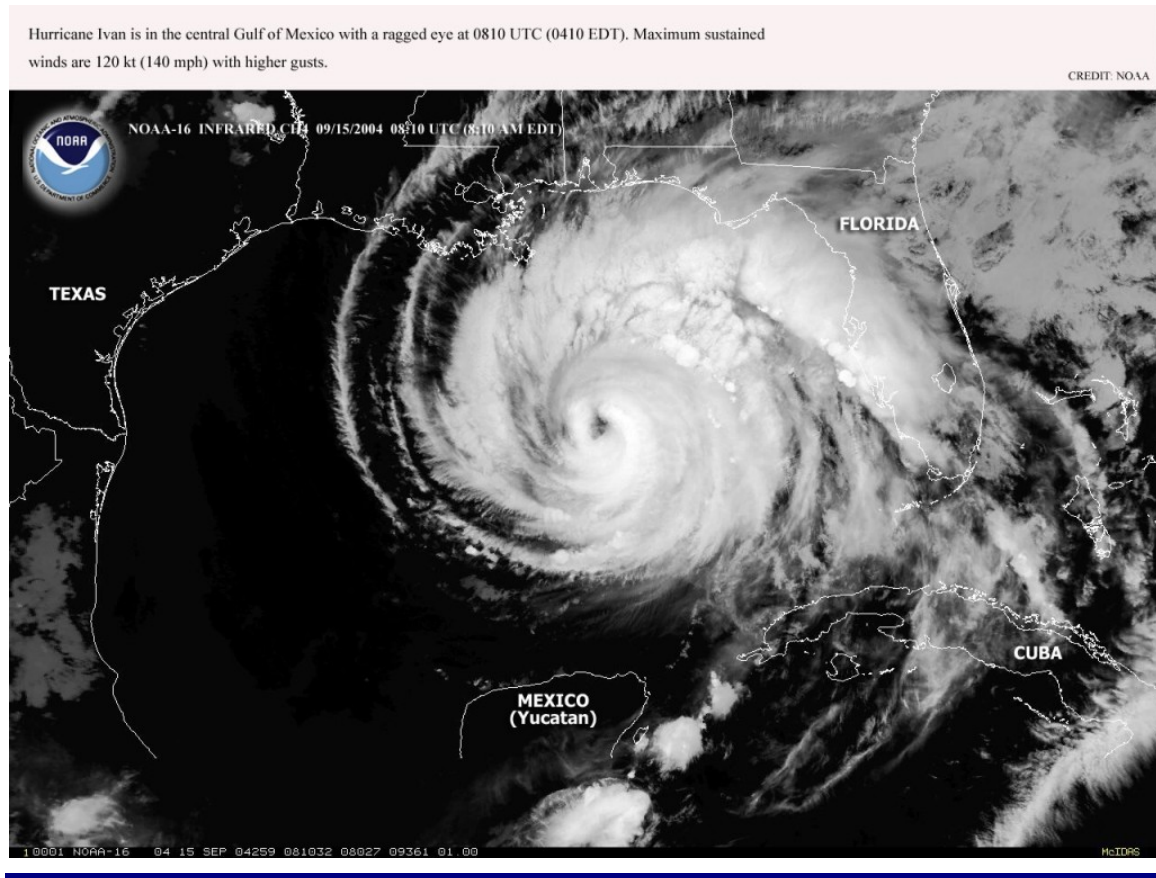
(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
National Environmental Satellite, Data, and Information Service -- Operations, Research and Facilities (ORF)				
Environmental Satellite Observing Systems	\$101,460	\$96,815	\$3,463	\$100,278
NOAA's Data Centers & Information Services	74,600	52,759	945	53,704
Total, NESDIS - ORF	176,060	149,574	4,408	153,982
Other National Environmental Satellite, Data, and Information Service Accounts				
Total, NESDIS - PAC	731,388	742,030	67,874	809,904
Total, NESDIS - Other	0	0	0	0
GRAND TOTAL NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE (Direct Obligations)	\$907,448	\$891,604	\$72,282	\$963,886
Total FTE	829	832	0	832



ORF: Operations, Research & Facilities
 PAC: Procurement, Acquisition & Construction



National Environmental Satellite, Data, and Information Service



The NOAA National Environmental Satellite, Data, and Information Service (NESDIS), is responsible for managing all aspects of remotely gathered environmental data. This includes procurement, launch, operation, product development, and product distribution for the nation's civil operational environmental satellites. Additionally, NESDIS manages the NOAA environmental data collections, and disseminates data and information to meet the needs of users in commerce, industry, agriculture, science and engineering, as well as federal, state, and local governments.

Through NESDIS, NOAA manages the Nation's operational environmental satellite systems; takes in, processes, and distributes satellite-derived products and services; and archives and provides global environmental meteorological, oceanographic, solid-earth

geophysics, and solar-terrestrial data. NOAA's polar-orbiting satellites work together with geostationary satellites stationed at the equator over the Americas to provide daily global data on weather conditions, atmospheric temperature structure, volcanic activity, sea surface temperature, forest fires, ozone levels, hurricanes, and typhoons. These satellites monitor storms and support NOAA's National Weather Service and Federal and local emergency management agencies, enabling them to provide advance warnings of emerging severe weather such as hurricanes, tornadoes, flash floods, winter storms, wildland fires, and floods. The satellites and the products and services NESDIS provides are essential to protect human life, property, and critical infrastructure. In support of the Nation's environmental data needs, NESDIS gathers global data about the oceans, Earth, air, space, the sun, and their interactions to describe and predict the state of the physical environment. NOAA's data centers archive the data which are necessary for scientists and industry to fully understand Earth's systems and long-term climatic, oceanographic, and geophysical effects on the environment and the economy. Through the Office of Space Commercialization, NESDIS manages commercial space activities for the Department. NESDIS supports the President's priorities in climate sciences, ocean and coastal management, energy, and forest resources protection by developing products from its satellite and data archives to meet user needs. As an important part of this support, NESDIS seeks opportunities to transition research satellite capabilities to operational products and services.

FY 2006 Budget Summary

NOAA requests a total of \$153,982,000 and 717 FTE to support the continued and enhanced operations of the National Environmental Satellite, Data, and Information Service. The total includes \$6,821,000 for Adjustments to Base, \$4,408,000 for Program increases, and \$33,307,000 for Terminations.

ADJUSTMENTS TO BASE:

NOAA requests an increase of \$6,821,000 and 3 FTE to fund adjustments to current program for National Environmental Satellite, Data, and Information Service activities. The increase will fund the estimated FY 2006 Federal pay raise of 2.3 percent and annualize the FY 2005 pay raise of 3.5 percent. The increase will also provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA), including rent for the new NOAA Satellite Operations Facility (NSOF). The NSOF will be GSA-owned and NOAA-leased. Due to the condition of Federal Building 4 (FB 4), the current location of NSOF activities, GSA has charged a below-market rental rate. NSOF is larger than the existing space in FB 4, and has a highly technical facility infrastructure that will be considerably more complex to operate. The FY 2006 request is based on occupancy expenditures for the entire fiscal year in the new facility, versus partial year funding in FY 2005. The increase in the rent will be \$4.8 million annually,

with consolidated annual operating costs of \$7.7 million for FY 2006 and beyond, an increase of approximately 120 percent over current FB 4 rental rates. Another component of the increased costs is NOAA will be the sole occupant of the new facility, and will no longer share costs with a second tenant.

The above amount includes a transfer of \$20,000 to OMAO for partial funding of a NOAA Corps Officer position that benefits NESDIS. In addition, \$37,000 and 1 FTE are being realigned to the Office of General Counsel within Program Support. Finally, NOAA has identified \$600,000 in off-sets to manage Space Commercialization activities for the Department of Commerce.

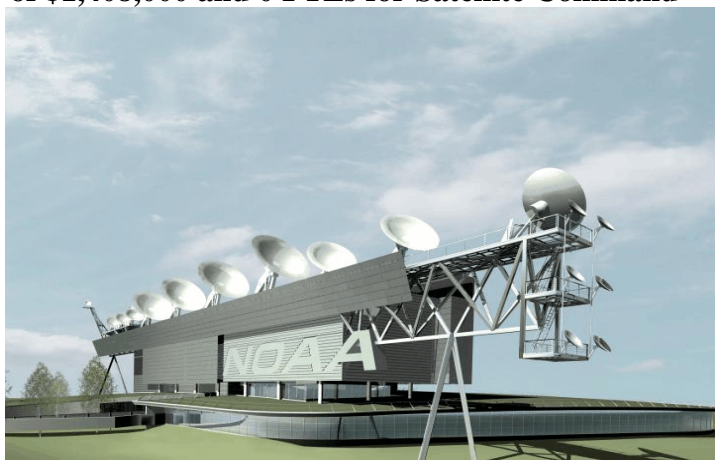
NESDIS – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

NOAA requests a net increase of \$4,408,000 over the FY 2006 base for a total request of \$153,982,000. These changes are summarized at the sub-activity level below. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2006 Technical Budget.

Environmental Satellite Observing Systems \$100,278,000

A net increase of \$3,463,000 and 0 FTE above the base is requested in the Environmental Satellite Observing Systems subactivity, for a total of \$100,278,000 and 414 FTE.

- **Satellite Command and Control:** \$1,408,000 and 0 FTE in net increases above the base, for a total of \$44,592,000 and 179 FTE, are requested under the Satellite Command and Control line item of the Environmental Satellite Observing Systems subactivity.
 - **NOAA requests an increase of \$1,408,000 and 0 FTEs for Satellite Command and Control.** Of these funds, \$800,000 will support additional operational requirements for NOAA and non-NOAA satellites, including preparation for Jason-2 operations. Jason-2 is a NASA satellite altimetry mission that includes partnership with NOAA, other federal agencies, and the international community.



Artist's conception of the NOAA Satellite Operations Facility (NSOF)

NOAA's role of providing continuous operations of Jason-2 will result in benefits to NOAA's weather and climate missions. These funds will be used for software and engineering support necessary to ensure uninterrupted flow of environmental data from NOAA and non-NOAA satellites to fulfill NOAA requirements. NOAA is also requesting an increase of \$608,000 for increases in the rent, security, and above standard operations and maintenance costs associated with the occupancy of the NOAA Satellite Operations Facility (NSOF) in Suitland, Maryland. The NSOF has been a joint General Services Administration (GSA) and NOAA activity and is a replacement facility for NOAA's satellite operations which were housed in Suitland Federal Office Building #4 (FB 4).

- **Product Processing and Distribution:** \$400,000 and 0 FTE in net increases above the base, for a total of \$27,628,000 and 126 FTE, are requested under the Product Processing and Distribution line item of the Environmental Satellite Observing Systems subactivity.
 - **NOAA requests an increase of \$400,000 and 0 FTEs to enable NOAA to process the expected increase in the amount of satellite data required to meet NOAA's mission requirements.** The increased funding will provide additional contractor support for operations, and hardware and software maintenance, and will allow NOAA to maintain critical services. It will support efforts to process non-NOAA satellite data from Jason-2 on an operational basis, and provide products to NOAA customers. This funding level continues to support the transition of specific products, using non-NOAA data, into operational products (i.e., 24 hours per day, 365 days per year). Products derived from data from NASA Earth Observing Satellite (EOS) research and DoD satellites provide value to products developed from NOAA's geostationary and polar satellites, and will enhance NOAA's warning and forecast efforts in tracking hurricanes, winter storms, flash flood warnings, and in monitoring oceanic and coastal ecosystem health. These products will enhance the over 450 environmental data products now processed and distributed to support customers including the National Weather Service, the Federal Aviation Administration, and the Departments of Agriculture, Defense, Energy, Homeland Security, and Interior.
- **Product Development, Readiness & Application:** \$1,531,000 and 0 FTE in net increases above the base, for a total of \$26,214,000 and 103 FTE, are requested under the Product Development, Readiness & Application line item of the Environmental Satellite Observing Systems subactivity.
 - **NOAA requests an increase of \$400,000 and 0 FTEs for the continued development of satellite data applications and products in advance of the next generation instruments on future satellite systems, reducing the time between availability of the data and operational use.** Product development supports atmospheric, climatic, oceanic, and terrestrial applications. A key

component of this sub-activity includes collaboration with the scientific and academic community to leverage the best expertise into NOAA's satellite research and development activities. Funding in FY 2006 will support the development of applications and products from non-NOAA satellites, including Jason-2, so that NOAA can make operational use of the data for forecasts and assessments.

- **NOAA requests an increase of \$1,094,000 and 0 FTEs for the Joint Center for Satellite Data Assimilation (JCSDA) to accelerate the application of satellite data for improving weather forecast models.** NOAA (including NWS, OAR, and NESDIS), NASA, and DoD are partners in this coordinated effort to more fully realize the potential of the vast quantities of satellite data that are becoming available. This program remains a critical risk reduction activity in preparation for the NPOESS Preparatory Project and NPOESS.
- **NOAA requests an increase of \$124,000 and 0 FTE for the Commercial Remote Sensing Licensing and Enforcement program.** The request will fully support implementation of the Department of Commerce's regulatory responsibilities for the licensing of commercial remote sensing systems and ensure compliance with the terms of the licenses.

NOAA's Data Centers & Information Services

\$53,704,000

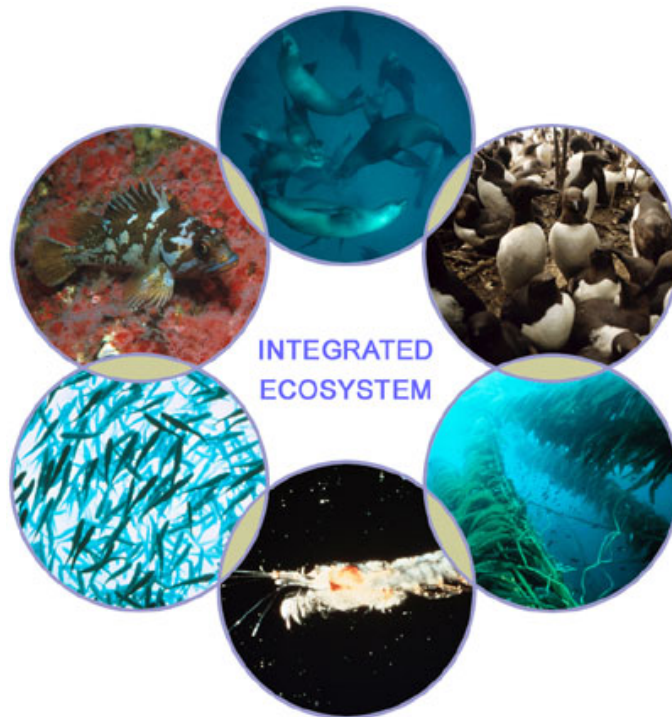
A net increase of \$945,000 and 0 FTE above the base is requested in the NOAA Data Centers and Information Services subactivity, for a total of \$53,704,000 and 303 FTE.

- **NOAA requests an increase of \$945,000 and 0 FTE, for a total of \$39,744,000 to the Archive, Access, and Assessment program.** Over 5 million customers per year access data from NOAA's National Data Centers, an increase from over 1 million users in 2001. Data Centers include the National Climatic Data Center (NCDC), located in Asheville, North Carolina; the National Oceanographic Data Center (NODC), located in Silver Spring Maryland; the National Geophysical Data Center (NGDC), located in Boulder Colorado; and the National Coastal Data Development Center (NCDDC) at the Stennis Space Center, Mississippi. The requested increase will enhance NOAA's ability to keep pace with user demands for data and assessment products for climate, oceans, space weather, and other geophysical phenomena. It will help ensure that the highest quality data are used in sound economic and environmental decisions. The funds will also enable NOAA to meet anticipated demands by its constituents for data in response to the Oceans Commission report, the Administration's Climate Research Plan, the evolving deployment of integrated coastal and ocean observing systems, and other policy directives.



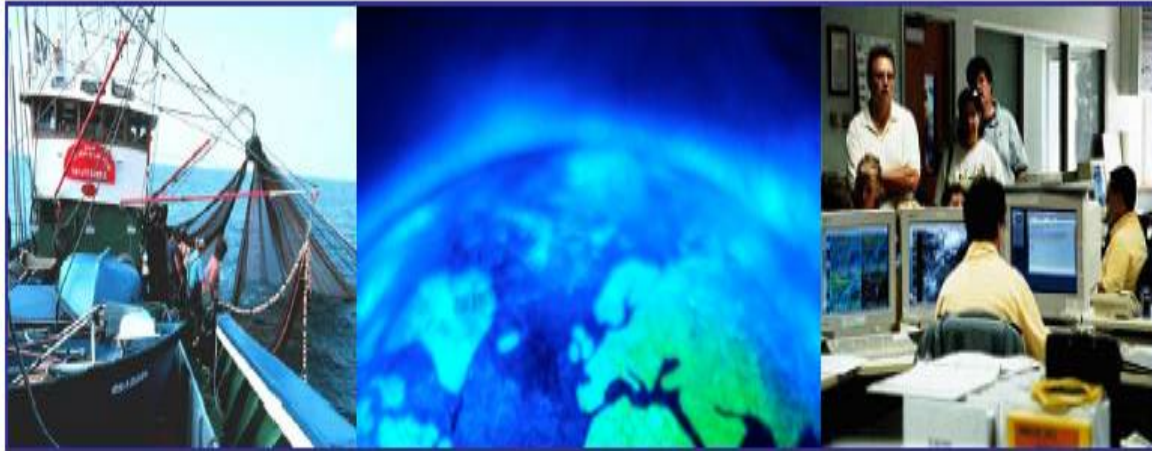
Program Planning and Integration

(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
Program Planning and Integration (Direct Obligations)	\$2,464	\$2,004	\$0	\$2,004
Total FTE	10	10	0	10





Program Planning and Integration



The Office of Program Planning and Integration (PPI) is responsible for overseeing NOAA's strategic planning programs, mandated by GPRA. It monitors and tracks accomplishment of goals and objectives stated in the NOAA strategic plan. PPI ensures that NOAA stays aligned with our stated mission and mandates. It ensures that NOAA is accountable for results. PPI guides management decisions across organizational lines. It creates more efficient and effective operations, including assisting in budget and performance integration and making financial performance improvements.

To meet societal needs – spanning from short term weather warnings to fishery population assessments to decadal climate prediction – NOAA must actively engage with stakeholders to formulate strategic goals, link goals to specific program activities and objectives, and ensure that all decisions, from the employee level to corporate decisions, are driven by strategic vision. NOAA's Office of Program Planning and Integration (PPI) was created to lead NOAA in these important endeavors. It provides leadership in strategic planning, National Environmental Policy Act (NEPA) compliance, matrix management, and development of economic and social science capacity. PPI leads the integration of the strategic planning process (including performance measurement) with all management units. It analyzes short and long-term strategic issues and produces planning decision documents for senior management. PPI works with NOAA Line Offices to engage stakeholders in planning with an emphasis on maintaining an on-going dialogue.

PPI houses the NOAA NEPA Coordinator, who is responsible for ensuring NEPA compliance in NOAA. To carry out this function, PPI employs a small staff to review and clear all NEPA documents; develop and train NOAA and DOC staff on national policy and guidance; and provide a liaison to the Environmental Protection Agency (EPA) and the White House Council on Environmental Quality (CEQ).

PPI is also the focus for matrix management in NOAA. Achieving NOAA's strategic plan goals requires the integration of resources across NOAA's line offices. NOAA has adopted matrix management as the prime mechanism to achieve this integration. Participants in the matrix program share responsibility for achieving the desired outcomes. To support the success of the matrix managed programs, PPI provides management, training, and evaluation functions.

The NOAA Chief Economist also resides in PPI and is focused on implementing the NOAA economics and social science research and analysis initiative. A key aspect of this effort is to ensure that NOAA investments are based on sound economic analysis and social considerations.

Desired outcomes of PPI's functions are:

- NOAA plans, investments, and actions are guided by a strategic plan that is responsive to societal needs
- NOAA investments are based on sound socio-economic analysis
- NOAA actions comply with the National Environmental Policy Act (NEPA)
- NOAA has effective programs that integrate talent, resources, and capabilities from across NOAA

FY 2006 Budget Summary

NOAA requests a total of \$2,004,000 and 10 FTE to support the continued and enhanced operations of the Office of Program Planning and Integration. The total includes \$4,000 for Adjustments to Base and \$464,000 for Terminations.

ADJUSTMENTS TO BASE:

NOAA requests an increase of \$4,000 and 0 FTE to cover inflationary increases to current programs in PPI. This amount includes transfers of \$20,000 to OMAO for partial funding of a NOAA Corps Officer position that benefits PPI.

PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

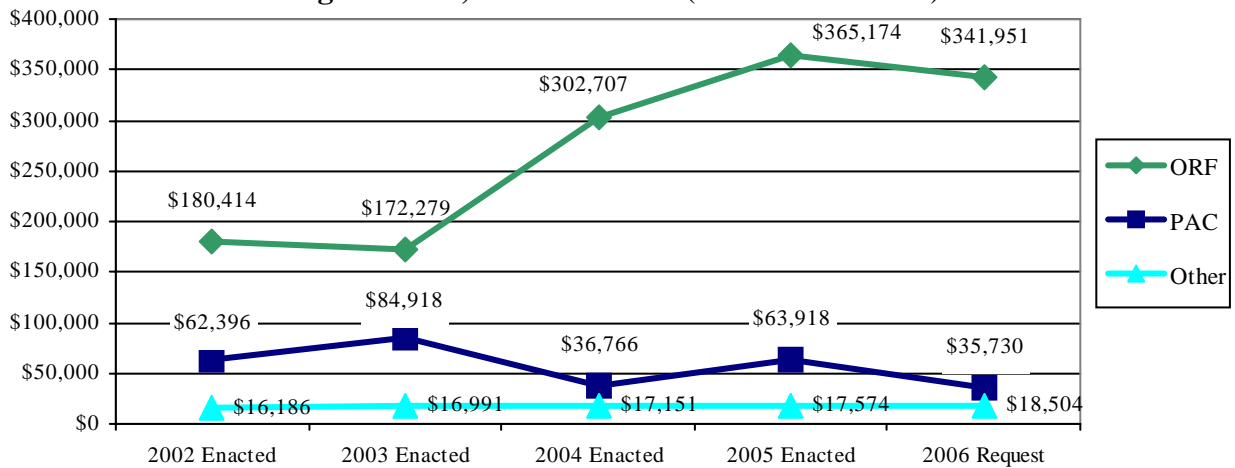
NOAA requests no increase over the FY 2006 base, for a total request of \$2,004,000, to support the continued and enhanced operations of the Office of Program Planning and Integration. There are no program changes in FY 2006.



Program Support

(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
Program Support -- Operations, Research and Facilities				
Corporate Services	\$169,069	\$174,812	\$24,592	\$199,404
NOAA Education Program	18,275	0	0	0
Facilities	33,281	17,057	5,025	22,082
NOAA Marine and Aviation Operations	144,549	120,465	0	120,465
Total Program Support - ORF	365,174	312,334	29,617	341,951
Other Program Support Accounts				
Total Program Support - PAC	63,918	36,733	(1,003)	35,730
Total Program Support - Other	17,574	18,504	0	18,504
GRAND TOTAL PROGRAM SUPPORT (Direct Obligations)	\$446,666	\$367,571	\$28,614	\$396,185
Total FTE	1,901	1,980	1	1,981

Budget Trends, FY 2002 - 2006 (dollars in thousands)



ORF: Operations, Research & Facilities
PAC: Procurement, Acquisition & Construction
Other: NOAA Corps Commissioned Officers Retirement



Program Support



Program Support consists of Corporate Services, Facilities, and the Office of Marine and Aviation Operations (OMAO). NOAA Program Support provides the administrative, financial, and infrastructure services that are essential to the successful performance of NOAA's mission. In addition to NOAA-wide policy formulation and direction, the Program Support activities specifically support the *people* of NOAA, ensuring that they have the proper work environment, the necessary tools and equipment, and the vital personnel and finance services which, in turn, allow them to provide the finest possible service to the American people, our economy and our environment

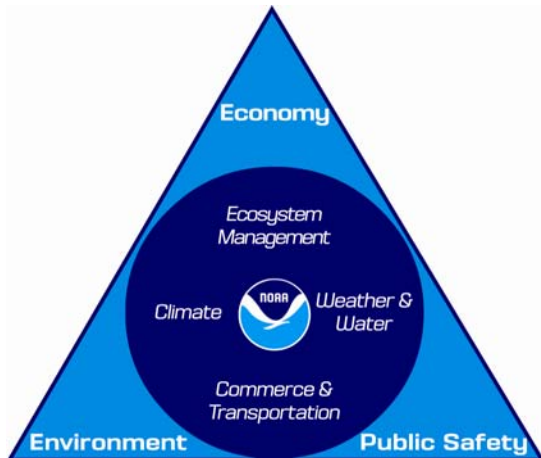
CORPORATE SERVICES

The Under Secretary and Associate Offices (USAO), including the Office of General Counsel, provide the top leadership and management for NOAA. USAO formulates and executes policies and programs for achieving the objectives of NOAA; develops, plans, and coordinates major program efforts; exercises delegated authority in committing NOAA to courses of action; and represents NOAA in executive level liaison with other federal agencies, the Congress, and private industry. The Under Secretary, Assistant Secretary, and Deputy Under Secretary comprise the top of NOAA leadership. The Associate Offices, more commonly known as NOAA's Staff Offices, are described below.

Office of Public, Constituent, and Intergovernmental Affairs (OPCIA) provides advice and counsel on media, constituent, and intergovernmental relations. The OPCIA consists of four elements, each addressing a unique audience: Public Affairs (media

relations), Constituent Affairs (non-government organizations), Intergovernmental Affairs (state, tribal, territorial, regional, and local government), and Outreach.

Office of Education and Sustainable Development (OESD) provides expert support on education activities to NOAA Line, Program, and Staff Offices, while promoting NOAA services and products and their benefits to the public. OESD consults within NOAA and with the Department of Commerce, and identifies opportunities for the deployment of coordinated interagency/intergovernmental policy strategies that recognize the importance of linking economic and environmental goals.



Office of Legislative Affairs (OLA) serves as the primary liaison for NOAA with the members and staff of Congress. The office is also responsible for the planning, direction, and coordination of legislative programs that are of immediate concern to the Office of the Under Secretary.

Office of International Affairs (OIA) plans and coordinates NOAA's international programs and carries out, as directed by the Office of the Under Secretary, tasks of special interest related to international

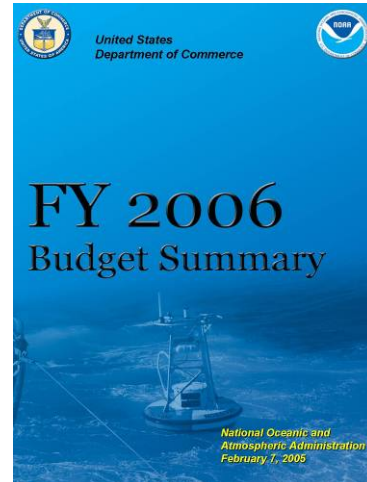
activities. The Deputy Assistant Secretary for International Affairs exercises a leadership role in establishing policies, guidelines, and procedures for NOAA's international programs.

Office of the Federal Coordinator for Meteorology (OFCM) establishes procedures for systematic and continuing review of national basic and specialized meteorological and oceanographic requirements for services and supporting research, and brings federal agencies concerned with international activities and programs in meteorological and oceanographic programs into close consultation and coordination.

Office of General Counsel (OGC) serves as the chief legal office for all legal matters arising in connection with the functions of NOAA, except for legal issues common to all Department bureaus handled by the Department of Commerce General Counsel.

The Office of the Chief Administrative Officer (OCAO) provides management and support services to include the Executive Secretariat, Audits and Civil Rights. OCAO oversees the NOAA facilities and property management program and provides a full range of administrative support functions across NOAA.

The Office of the Chief Financial Officer (CFO) serves as the principal financial manager for the NOAA organization with approximately \$7 billion in capital assets. The CFO's office, containing Budget and Finance branches, has primary responsibility for budget formulation and execution, resource management, financial systems development and financial management. The CFO Act of 1990 requires the CFO's Office to provide the leadership necessary for NOAA to obtain a yearly unqualified opinion in the audit of its consolidated financial statements. Under the direction of the CFO, the Budget and Finance Offices perform methods and procedures analysis and systems and organizational research to support senior management in making executive decisions to ensure operational efficiencies within NOAA.



The NOAA CFO's Office produces the Budget Summary each year

The Office of Acquisition and Grants (OAG) provides support to NOAA line offices with planning, solicitation, award, administration and closeout of acquisitions, grants, and cooperative agreements. It works closely with mission partners (universities, individuals, non-profit and for-profit organizations, as well as state, tribal, and local government entities).

The Office of the Chief Information Officer (OCIO) develops policies for, and provides oversight of, IT throughout NOAA as required under the Clinger-Cohen Act, the Federal Information Management Security Act, the Paperwork Reduction Act, and statutory and other legal requirements. The line also provides management of NOAA's Homeland Security Activities; enterprise networks, network services, and IT security; and high performance computing and communications activities.

The Office of Human Resources (HR) services NOAA's most important asset - its employees. HR provides the policies, programs, and processes that facilitate the recruitment, hiring, development, and retention of a diverse, highly skilled, motivated, and effective workforce capable of accomplishing NOAA's mission.

The Office of Program Analysis and Evaluation (PA&E) provides independent and objective analysis in support of corporate management. This Office makes NOAA more efficient and effective in its programmatic decision making process.

FACILITIES

NOAA Facilities Management, Construction and Maintenance program provides effective and efficient services to keep facilities in well-maintained condition, construct and renovate facilities to meet mission needs, and dispose of facilities no longer required. NOAA's capital assets total 513 installations across all 50 states and territories. Many facilities exceed 30 years of age. NOAA Facilities Management initiatives are directed at reducing operating costs associated with these older structures.

OFFICE OF MARINE & AVIATION OPERATIONS (OMAO)

Marine Operations

OMAO operates NOAA's fleet of vessels, ensuring operational readiness and maximum platform utilization in support of NOAA's at-sea data requirements. It provides centralized management for operations, fleet planning, and maintenance support. OMAO also has responsibility for NOAA's fleet safety programs, diver training program, and Teacher-at-Sea program. NOAA Corps officers, crews, and scientists with at-sea duty are required to train and be certified through OMAO. NOAA's vessels support nautical charting, bathymetric mapping, fisheries research, marine environmental assessments, coastal-ocean circulation studies, and oceanographic and atmospheric research. The 18 active ships perform approximately 4,950 operating days in support of NOAA programs. The vessels operate on both the East and West Coasts. OMAO's Marine Operations Center (MOC) has Atlantic and Pacific regional offices located in Norfolk, Virginia, and Seattle, Washington, respectively, and the vessels are assisted by a small support staff at the home port of most ships. The centers provide maintenance, stores, supplies and repair facilities for the vessels.



Launching of NOAA's newest Fisheries Survey Vessel, OSCAR DYSON

The NOAA Commissioned Corps is the nation's seventh and smallest uniformed service. Corps officers support the fleet and NOAA Line Offices. Marine Services funds the majority of the NOAA Corps payroll. The officers of the NOAA Corps command

NOAA's research and survey vessels, fly NOAA's "hurricane hunter" and environmental monitoring aircraft, support field operations, and serve in a variety of technical and management positions throughout the agency.

Aviation Operations



**NOAA Gulfstream IV (G4)
Hurricane Hunter**

OMAO's Aircraft Operations Center (AOC), located at MacDill Air Force Base in Tampa, Florida, ensures the availability and readiness of NOAA's uniquely configured aircraft. AOC provides centralized management of a fleet of 13 aircraft that are used as observation platforms equipped with comprehensive data-collection systems in support of missions related to the Earth's environment, coastal and marine resources, and severe-weather data. In FY 2006, Aircraft Services will provide 2,050 hours flight hours in support of NOAA missions. NOAA

aircraft are fitted with specialized instrumentation for research, data collection, and required data processing. One of NOAA's two WP-3D hurricane hunters and the G-IV high-altitude jet will be mission-ready with instruments and personnel for hurricane surveillance, reconnaissance and research during the hurricane season from June 1 to December 1. In addition to various projects, the other P-3 also will be used for an air-chemistry project from July 1 to September 30. The G-IV will also be mission-ready with instruments and personnel to collect data for West Coast winter-storm predictions from December 1 to April 1. The Turbo Commander or Shrike will be mission ready with equipment and personnel for snow surveys needed for flood forecasts and water management from October 1 to May 1.

NOAA Corps Retirement Pay (Mandatory)

The retirement system for the uniformed services provides a measure of financial security after release from active duty for service members and their survivors. It is an important factor in the choice of a career in the uniformed services and is mandated by Federal statutes under Title 10, United States Code. NOAA transfers retirement pay funds to the Coast Guard, which handles the payment function for retirees and annuitants. Health care funds for non-Medicare-eligible retirees, dependents, and annuitants are transferred to the U.S. Public Health Service, which administers the health care program.

FY 2006 Budget Summary

NOAA requests a total of \$341,951,000 and 1,976 FTE for NOAA Program Support. The total includes \$1,479,000 for Adjustments to Base, \$29,617,000 for Program increases, and \$54,319,000 for Terminations.

ADJUSTMENTS TO BASE:

Corporate Services

NOAA requests an increase of \$6,306,000 and 74 FTE to fund adjustments to base for Corporate Services. The increase will fund the estimated FY 2006 Federal pay raise of 2.3 percent and annualize the FY 2005 pay raise of 3.5 percent. The increase will also provide inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Service Administration (GSA).

The above amount includes a transfer of \$1,600,000 and 74 FTE from various Line Offices to the Office of General Counsel in USAO.

Facilities

NOAA requests a net decrease in the Facilities line of \$9,614,000 and 0 FTE, including a reduction of \$11,133,000 from the NOAA-wide Facility Maintenance (Consolidated) line and a reduction of \$689,000 from the Western Regional Center Operations and Maintenance line. These items are offset by increases of \$2,101,000 to the NOAA Facility Management and Construction line, \$64,000 for Boulder Facilities Operations, and \$43,000 for Environmental Compliance and Safety.

OMAO

NOAA requests a net increase of \$4,787,000 and 5 FTE for ATBs in OMAO. This includes gross increases of \$12,841,000 for pay raises, expenses and data acquisition, \$1,235,000 for Fleet Planning and Maintenance, and \$558,000 for Aircraft Services. The gross increases are offset by decreases of \$1,478,000 for UNOLS, \$4,533,000 for HI'ALAKAI, \$2,484,000 for OSCAR DYSON and FAIRWEATHER, and \$542,000 for NANCY FOSTER, all under Marine Services. Likewise, Fleet Planning and Maintenance is reduced by \$908,000 for the same vessels, netting an increase of \$327,000.

The above amount includes a technical adjustment to move \$280,000 from various Line Offices to OMAO. This request will centrally fund and manage 16 NOAA Corps Officers to support the goals and cross-cutting priorities identified in the NOAA Strategic Plan and to support several staff offices. Program managers have identified the need for

NOAA Corps officers to be detailed to their programs. These officers bring diverse field and staff experience to programs. Through the regular rotation process, an officer develops experience in more than one Line or Staff Office and at various locations within that organization. Program managers also need the responsiveness and flexibility inherent in a Commissioned Corps system. Officers can be assigned, on very short notice, to a different geographical location or program to meet the needs of the agency.

Program Support – ORF PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

NOAA requests a net increase of \$29,617,000 and 1 FTE for a total program of \$341,951,000 in FY 2006 to support continued and enhanced operations of NOAA’s mission support personnel and activities. Detail numeric breakouts are located in Chapter 7, *Special Exhibits* and more detail descriptions are found in the NOAA FY 2006 Technical Budget.

Corporate Services **\$199,404,000**

NOAA requests an increase of \$1,600,000 for the Office of General Counsel within the USAO. These funds will support salaries and benefits, travel, rent, contractual services, and IT support services, which have previously been covered by direct billing of NOAA line offices.

NOAA requests an increase of \$1,830,000 for the OCIO for the capital projects described below:

- **An increase of \$1,370,000 and 1 FTE for improvements to the Capitol Planning and Control Process.** The requested funds will implement a formal independent verification and validation (IV&V) project-status-assessment program, and continue the development and maintenance of an Enterprise Information Technology Architecture that is essential for the investment decision process. This will also fund a critically needed staff succession plan.
- **An increase of \$460,000 and 0 FTE for NOAA IT Refreshment.** The funds will be used for CAMS and local area network switch replacements. This increase is required to establish recurring program funding to refresh obsolete IT equipment which poses increasing IT security risks.

NOAA requests an increase of \$4,050,000 and 0 FTE to implement, operate, and maintain the NOAA enterprise IT security architecture. This will fund response teams; firewalls and intrusion detection at internet-access points; proactive patch management; security education and training; and penetration testing of critical systems. These funds will provide the enterprise-level structure to effectively respond to OMB-directed IT security architecture requirements.

NOAA requests an increase of \$1,500,000 and 0 FTE for the Office of the Chief Financial Officer (CFO) to support the End-to-End Resource Management System and Activity Based Budgeting and Planning (ABB/P). Of the funding requested for the CFO, \$1,000,000 will be used to develop an end-to-end formulation and execution capability for the financial management of NOAA's 41 programs. A seamless end-to-end process will modernize/streamline the formulation, execution and presentation of NOAA's budget, and continue to move NOAA from the time intensive manual process to a streamlined and efficient process. These resources will provide funding for acquisition and implementation of software and resources for planning and will allow NOAA to integrate existing systems providing end user interfaces. Software and hardware maintenance upgrades for the existing systems will be provided.

The remaining CFO request will be used to support Activity Based Costing/Management (ABC/M). Funding will be used to fully realize the NOAA- wide strategic value and tangible benefits of ABC/M, the next step is to implement the Business Management Fund using Activity Based Budgeting and Planning (ABB/P). These funds will provide resources for contractor support to employ ABB/P for the first year of implementation. Investing in technology to automate manual processing, and change business practices will reduce redundant and unnecessary processes.

NOAA requests an increase of \$1,500,000 and 0 FTE for the CAO to support business process reengineering and improvements in the automation of administrative support functions and introduction of new technology. A series of management studies have identified various NOAA administrative and financial management areas that will benefit from streamlining business processes, automating paper intensive tasks, and redefining NOAA's service delivery model. This change will benefit NOAA's regional service center operations, as well as the headquarters activities.

NOAA request an increase of \$9,294,000 and 0 FTE for Payment to the Business Management Fund. This increase will support the provision of corporate administrative services across all NOAA Line Offices. Funding will be used to cover NOAA overhead assessments for each of the Line Offices based on consumption of services associated with financial, procurement, facilities management and human resource activities. In the past these services have been supported by a corporate assessment against the various Line Offices. The FY 2005 Appropriation consolidated NOAA corporate costs in Program Support at a level below the FY 2005 President's Budget. This increase continues this policy and restores the FY 2005 requested level.

NOAA requests an increase of \$5,229,000 and 0 FTE to support the Commerce Business System (CBS). This increase fully funds the CBS system. This funding will support crucial financial system improvements and enhancements to the NOAA Data Warehouse. Vital information technology hardware and security upgrades and increased disaster recover capability will also be made.

Facilities**\$22,082,000**

NOAA requests an increase of \$3,938,000 and 0 FTE to provide for contractor support/software costs and staff training needed to achieve efficiencies described in the FY 2004 management study of NOAA administrative services and the Facilities Program Re-engineering Initiative. Substantial retraining is required to enhance current workforce skills. In addition, ongoing professional certification training for professional engineers and architects is required as part of retaining professional certification of facilities professionals hired in FY 2004 and FY 2005. Contract support (including software licensing and maintenance) for implementing automated processes to support project management, personal and real property management, and integrated facilities assessments; and contract support for project management services and capital investment/facilities master planning (NOAA-wide) is required to achieve GAO-recommended improvements in implementing an integrated capital planning process, and in implementing sound project management principles and processes as part of the NOAA facilities management program. Failure to support these increases would result in continuing inefficiencies in the program, continuing failure to effectively plan and manage major construction projects, and the inability to leverage state-of-the-art software to support an effective construction project management program.

NOAA requests an increase of \$1,087,000 and 0 FTE, for a total of \$4,087,000, for NOAA's Environmental Compliance, Health & Safety Programs. This additional funding will allow NOAA to begin to address deficiencies in the following areas: 1) inventory, upgrades/replacements, and Operations & Maintenance (O&M) plans for all hazardous material storage tanks; 2) inspection, abatement/encapsulation, and O&M plans for all asbestos and lead-based paint materials; 3) provide workplace employee training; 4) provide required employee and facility safety equipment; 5) provide facility safety inspections; and 6) provide program support at field locations. Efforts will focus on the identification of operational and facility deficiencies, implementing corrective actions and improving environmental compliance and health & safety in the NOAA workplace. NOAA will strive to ensure that its facilities and operations are in compliance with all laws and regulations. Additionally, the funding will enable NOAA to reduce the risk of incurring regulatory citations that could result in financial penalties, employee civil or criminal citations, or both. These new requirements are in addition to the environmental compliance base funding program requirements.

OMAO**\$120,465,000**

NOAA requests no program changes to the Office of Marine and Aviations ORF accounts.

[Page intentionally left blank]

Chapter 5

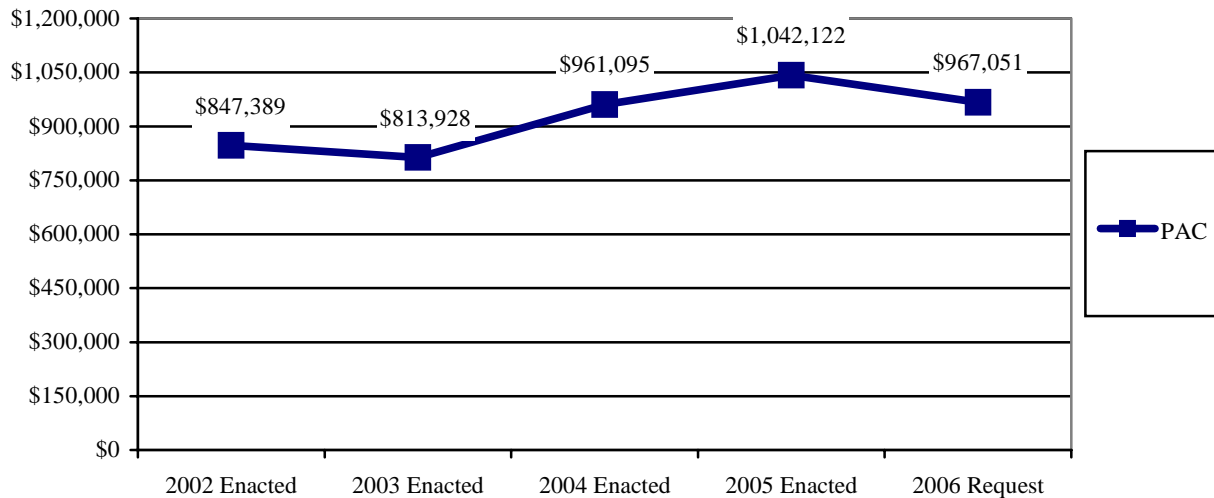
NOAA Procurement, Acquisition and Construction



Procurement, Acquisition and Construction

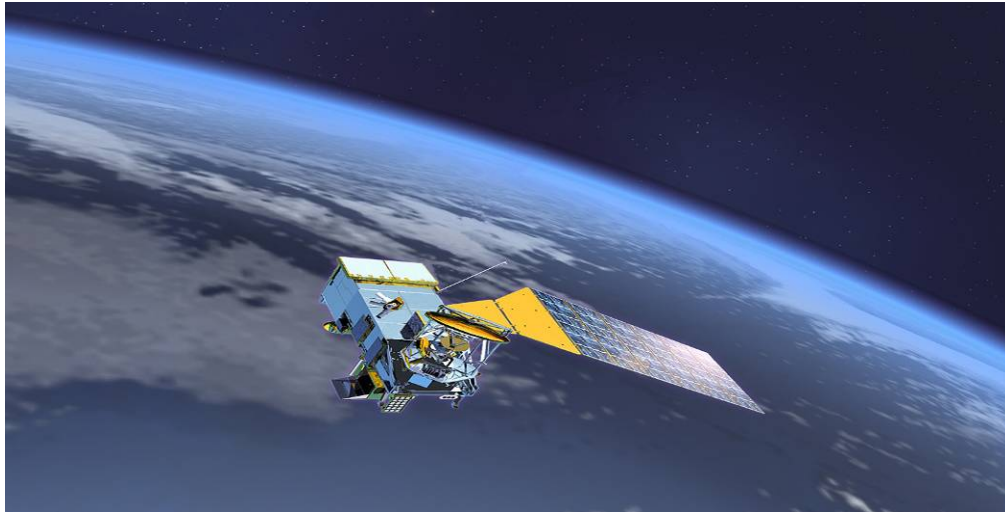
(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
Procurement, Acquisition and Construction (PAC)				
Systems Acquisition				
Ocean and Atmospheric Research	\$9,663	\$9,500	\$984	\$10,484
National Weather Service	63,973	64,587	7,716	72,303
National Environmental Satellite, Data and Information Service	718,077	728,525	79,129	807,654
Program Support	986	0	0	0
Total Systems Acquisition	792,699	802,612	87,829	890,441
Construction				
Fleet	186,491	42,805	(1,925)	40,880
Aircraft	57,957	35,313	417	35,730
	4,975	1,420	(1,420)	0
GRAND TOTAL PAC	\$1,042,122	\$882,150	\$84,901	\$967,051
Total FTE	174	174	0	174

Budget Trends, FY 2002 - 2006 (dollars in thousands)





Procurement, Acquisition and Construction



NOAA's Procurement, Acquisition and Construction (PAC) account is mission critical to all agency programs and contributes significantly to achieving all NOAA Strategic Goals. The system acquisition projects included in this request will have a major impact on our ability to monitor and to forecast weather and climate change on a global basis. The construction projects will aid environmental recovery efforts and address NOAA infrastructure needs in housing the NOAA Center for Weather and Climate Prediction and restoring various buildings at the Galveston Laboratory. Our fleet replacement project adjustments will redistribute funding to maximize the return on investment while sustaining NOAA fisheries research programs. Eliminating PAC funding for the aircraft replacement project for safety and regulatory upgrades to various aircraft will not affect mission readiness.

ADJUSTMENTS TO BASE:

The NOAA Procurement, Acquisition and Construction (PAC) requests adjustments to FY 2006 Base of \$12,158,000.

PAC PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

For FY 2006, NOAA requests an increase of \$84,901,000 with a total of \$967,051,000 for current programs. These changes include 20 major system programs, seven construction projects, three fleet projects, and withdrawal of funding for one aircraft project. Detailed numeric breakouts are located in Chapter 3, *Special Exhibits*. Descriptions of each request by line item are located in the NOAA FY 2006 Technical Budget. Note that outyear figures are estimates, and future requests will be determined through the annual budget process.

SYSTEMS ACQUISITION \$890,441,000

Office of Oceanic and Atmospheric Research \$10,484,000

Research Supercomputing

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
Research					
Supercomputing/CCRI	10,484	10,484	10,484	10,484	10,484

NOAA requests an increase of \$984,000 and 0 FTE for a total of \$10,484,000 for Research Supercomputing (CCRI). This program supports a very large, scalable computer system that provides critical computing, storage, and analysis capabilities, as well as model development and infrastructure support, to NOAA’s Geophysical Fluid Dynamics Laboratory (GFDL) to advance the Nation’s climate research. This computing program allows NOAA to leverage the world-class research staff and modeling capabilities now in place at GFDL to address important research problems in climate and weather research. The laboratory’s on-going model development effort is positioning GFDL to take full advantage of the scalable architectures and to advance the Nation’s climate research program through NOAA computational research and collaboration with the inter-agency and academic climate research community.

National Weather Service

\$72,303,000

Tsunami Warning Program

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
Tsunami Warning Program	3,530	1,850	350	350	350

NOAA requests an increase of \$3,530,000 and 0 FTE for a total of \$3,530,000 to strengthen the U.S. Tsunami Warning Program. This budget request completes the Administration’s 2-year plan to strengthen the U.S. tsunami warning program in light of the December 26, 2004 Indian Ocean Tsunami. Funds will be used to complete the planned acquisition of deep ocean assessment and reporting of tsunamis (DART) buoys for the Pacific Ocean Basin and the Caribbean/Atlantic Ocean region. Expanded monitoring capabilities throughout the entire Pacific and Caribbean basins and significant portions of the mid Atlantic will provide tsunami warning capability for regions bordering half of the world’s oceans.

COOP Modernization

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
COOP Modernization	4,277	4,277	4,277	4,277	4,277

NOAA is requesting an increase of \$3,400,000 and 0 FTE with a total FY 2006 funding of \$4,277,000 for the Cooperative Observer Network Modernization (COOP), to continue deployment of modernized COOP sites nationwide as NWS implements the “National Cooperative Mesonet”. This includes completing the full modernization of 289 stations in the Northeast, including completion of the 220 modernized sites in New England. The proposed COOP modernization will provide the United States with a network of accurate, near real-time surface weather data (temperature and precipitation) obtained with state-of-the-art measurement, monitoring, and communication equipment. Quality controlled, higher density, real-time surface data will improve temperature-forecasting skill, river height forecast error, drought monitoring resolution, hydrology planning, and energy optimization for NWS customers. Improved sensors, including wind data, can provide timely data in response to homeland security events or disasters. A Tennessee Valley Authority study found that a one-degree improvement in temperature forecasting could save \$1 billion annually in energy costs. This initiative supports the Western Governor’s recommendation to utilize the

modernized National Cooperative Mesonet as the core infrastructure for the National Integrated Drought Information System.

NOAA Weather Radio

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
Complete & Sustain NOAA Weather Radio	5,650	5,650	5,650	5,650	5,650

NOAA requests an increase of \$5,650,000 and 0 FTE to complete and to sustain NOAA Weather Radio (NWR). Funds will be used to complete NWR broadcast coverage of all areas in the United States identified as at high risk of severe weather events, by establishing 17 new broadcasting stations. Additionally, funds will be used to improve network reliability by refurbishing 400 stations established in the 1970s. NOAA is working with the Department of Homeland Security, to make NWR a national all hazards warning network of 900 broadcasting stations and reaching 97% of the nation's population.

Coastal-Global Ocean Observing System

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
C-GOOS	1,497	1,497	1,497	1,497	1,497

NOAA requests an increase of \$1,497,000 and 0 FTE to establish a Coastal-Global Ocean Observing System (C-GOOS) in the NWS. The C-GOOS Program fulfills the U.S. coastal component of the international GOOS effort and addresses the mandate of the President's Commission on Ocean Policy and the National Oceanographic Partnership Program to bring together government, industry and academia. In FY 2005 Congress provided NOS \$8,000,000 to add oceanographic sensors to the existing NWS marine observational backbone. In FY 2006, NOAA's C-GOOS will deploy new buoys, add the capability to enhance future buoys with biological and chemical oceanographic sensors to allow biological and chemical water sampling; provide information on locations of marine endangered or protected species; and monitor coral reef health.

Weather and Climate Supercomputing

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
Weather & Climate Supercomputing	19,285	19,285	19,285	19,285	19,285

NOAA requests no change to the \$19,285,000 base for Weather and Climate Supercomputing. The cyclical upgrade of the NWS weather and climate supercomputing capability is intended to procure the computing and communications equipment needed to receive and to process the increasing wealth of environmental data acquired by modernized observing systems, and to support more sophisticated numerical weather prediction models, and stay current with the available supercomputing technology. Execution of this program promotes public safety and the protection of property by providing the NCEP with the computer systems that are capable of producing more accurate, NWS climate and numerical weather prediction (NWP) guidance products for hurricanes, severe thunderstorms, floods, and winter storms. Additionally, the supercomputing system more accurately forecasts large-scale weather patterns in the medium (3 to 10 days) and extended range (30 days), plus forecasts of major climate events such as El Niño and La Niña. In addition, the computer upgrades will improve the delivery of products to the field and provide system users with enhanced productivity. These products and services will lead to significant economic benefits for users, like the agriculture, construction, and transportation industries.

Weather and Climate Supercomputing Backup

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
Weather & Climate Supercomputing Backup	7,148	7,148	7,148	7,148	7,148

NOAA requests no change to the \$7,148,000 base for the Weather and Climate Supercomputing Backup. Because of the critical need of the weather and climate output, it is essential that a backup capability be operational, as part of contingency planning.

Automated Surface Observing System

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
ASOS	4,675	4,675	4,675	0	0

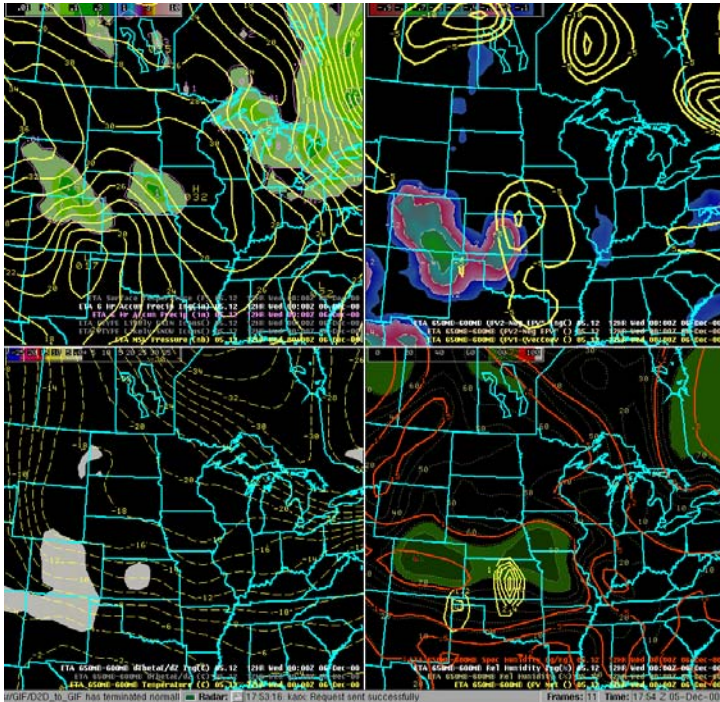
NOAA request no change to the \$4,675,000 base for the Automated Surface Observing System (ASOS). This acquisition is a tri-agency program involving NOAA, DoD, and FAA. ASOS provides reliable, 24-hour, continuous surface weather observations. Under the product improvement portion of this acquisition program, NOAA is developing new ASOS sensor capabilities in order to meet changing user requirements and decrease maintenance demands. FY 2006 funding will complete enhanced precipitation identifier sensor deployment of 282 units and acquire and deploy 68-25,000 feet ceilometers.

Advanced Weather Interactive Processing System

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
AWIPS	12,894	12,984	12,984	12,984	12,984

NOAA request no change to the \$12,894,000 base for the Advanced Weather Interactive Processing System (AWIPS)/NOAAPort. AWIPS is the cornerstone of the modernized NWS. This system integrates and displays all hydrometeorological data at NWS field offices. AWIPS acquires and processes data from modernized sensors and local sources, provides computational and display functions at operational sites, provides an interactive communications system to interconnect NWS operational sites, and disseminates warnings and forecasts in a rapid, highly reliable manner. This system integrates satellite and radar data more fully and provides to the local field forecaster a capability



modernized NWS. This system integrates and displays all hydrometeorological data at NWS field offices. AWIPS acquires and processes data from modernized sensors and local sources, provides computational and display functions at operational sites, provides an interactive communications system to interconnect NWS operational sites, and disseminates warnings and forecasts in a rapid, highly reliable manner. This system integrates satellite and radar data more fully and provides to the local field forecaster a capability

AWIPS map

that significantly improves forecasts and warnings. NOAAPort offers the communications capability to provide internal and external users with open access to much of NOAA's real-time environmental data.

Current AWIPS processing, communications, and storage capacity is inadequate to support current and future system processing demands from the three sources listed above. These pre-planned and ongoing NOAA investments in modeling, satellite instruments, and radar improvements (NEXRAD Product Improvement) represent NOAA's commitment to bring forecasters the data and information required to improve forecast accuracy and warning lead times.

System-wide information technology investments are necessary to equip NWS forecast offices with the necessary computer performance and capacity to achieve planned and evolving operational and strategic requirements. Planned improvements in the NWS Tornado Warning Lead Time, Flash Flood Warning Lead Time and Winter Storm Warning Lead Time goals can only be realized through the following actions: improve AWIPS system throughput; add new and improved science; and exploit more accurate and higher resolution data and weather forecast model information. To accomplish this, we must improve AWIPS system's performance and capacity. Current choke points in system performance and capacity have been identified in the following areas: workstation and server performance, network throughput, and software architecture.

Improvements in system throughput can be realized by increasing processing and network capacity. Exploitation of new science requires radar, satellite and model data in addition to processing capacity and the ability to quickly and cost-effectively integrate improved decision assistance tools into the AWIPS software. High-resolution data and model information requires additional communications bandwidth, processing and mass storage capacity. For example, the satellite broadcast network (SBN) does not have the capacity to distribute the entire suite of current Eta-12 data, let alone the higher resolution models and products anticipated in FY 2006 such as WRF-8. Insufficient resolution is a serious limitation in providing timely, accurate forecasts and warnings to the public.



A NOAA Next Generation Radar

Next Generation Weather Radar

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007 Estimate</u>	<u>FY2008 Estimate</u>	<u>FY2009 Estimate</u>	<u>FY2010 Estimate</u>
NEXRAD	8,460	8,460	8,460	8,460	0

NOAA requests a decrease \$2,360,000 and 0 FTE for a FY 2006 total of \$8,460,000 for Next Generation Weather Radar (NEXRAD). The total decrease reflects the completion of contract obligations for open systems radar detection (ORDA) and a ramp-up in dual-polarization development efforts. FY 2006 plan provides for the deployment of 101 ORDA units and award of the dual polarization development and production contract.

NWS Telecommunication Gateway

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007 Estimate</u>	<u>FY2008 Estimate</u>	<u>FY2009 Estimate</u>	<u>FY2010 Estimate</u>
NWSTG	500	500	500	500	0

NOAA requests a decrease of \$2,012,000 and 0 FTE for the NWS Telecommunications Gateway (NWSTG) Legacy Replacement with the completion of one-time costs planned for the deployment of the NWSTG Legacy Replacement.

The remaining \$0.5M is needed to provide a cyclical information technology refresh capability and to avoid future costly NWSTG system upgrades. NWSTG is the communications hub for collecting and distributing weather information to NWS field units and external users. Replacing the NWSTG system with up-to-date technology will reduce current delays in collecting and disseminating data. In FY 2006, NWS will conclude the three-year NWSTG replacement effort at NWS facilities.

Radiosonde Network Replacement

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007 Estimate</u>	<u>FY2008 Estimate</u>	<u>FY2009 Estimate</u>	<u>FY2010 Estimate</u>
Radiosonde Replacement	4,387	4,387	4,387	4,387	0

NOAA requests a decrease of \$1,989,000 and 0 FTE for a FY 2006 total of \$4,387,000 for Radiosonde Replacement Program to reflect the reduced scope of total radiosonde acquisition. The FY 2006 Budget will modernize 84 out of 102 sites, and will allow a second GPS balloon-borne instrument (radiosonde supplier contract to be awarded. The NWS radiosonde network provides upper-air-weather observations; the primary source of data required by NWS numerical weather prediction models, which form the basis of all NWS forecasts for day 2 and beyond. Observations of temperature, pressure, humidity, and wind speed/direction are taken twice a day at 102 locations nationwide and in the Caribbean using a radiosonde which transmits the data via radio signal to a ground receiving station usually located at a Weather Forecast Office (WFO), where it is processed.

**National Environmental Satellite, Data
and Information Service**

\$807,654,000

Geostationary Operational Environmental Satellites

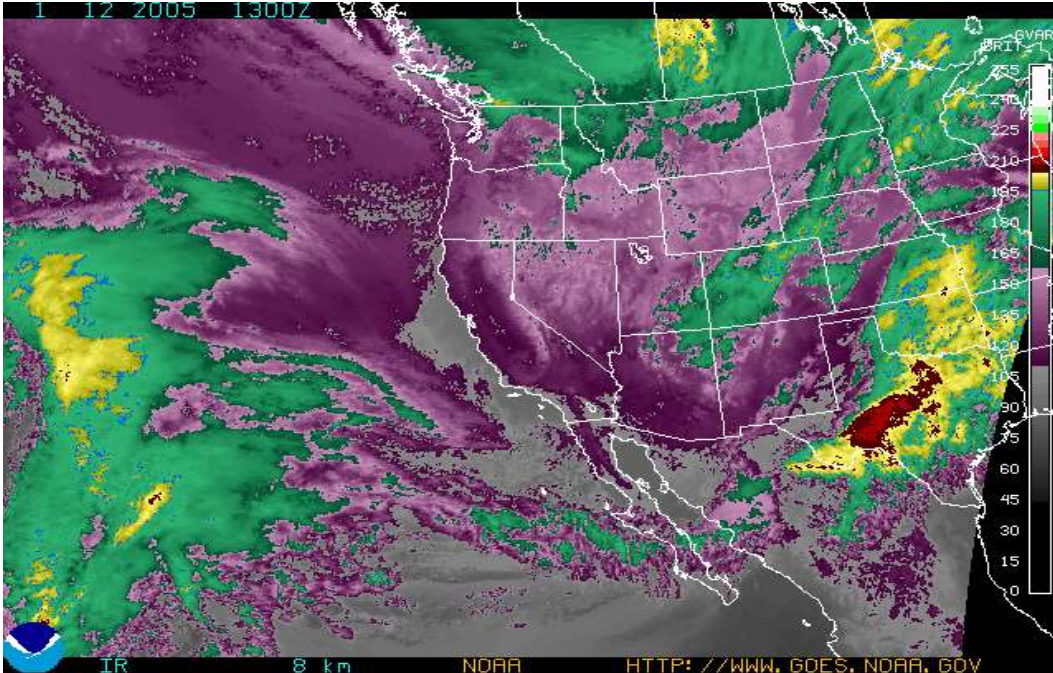
Annual Funding Requirements
(BA in Thousand)

	<u>FY2006</u>	<u>FY 2007 Estimate</u>	<u>FY2008 Estimate</u>	<u>FY2009 Estimate</u>	<u>FY2010 Estimate</u>
GOES	358,142	454,039	532,079	539,563	570,501

NOAA is requesting a net increase of \$52,605,000 and 0 FTE for the Geostationary Operational Environmental Satellites (GOES), a total request of \$358,142,000, to continue the procurement of spacecraft, instruments, launch services, and ground systems equipment necessary to maintain an uninterrupted flow of environmental data to the users.

NOAA is requesting a decrease in GOES-N series funds of \$30,373,000 and 0 FTE in FY 2006 for a total of \$117,042,000. GOES-N replaces the GOES-I series, which is funded through FY 2006. The spacecraft contract for the GOES-N series is a firm fixed price contract. The GOES-N program also includes separate contracts for the instruments, one for the imager and sounder and one for the Solar X-ray Imager.

NOAA is requestings an increase in the GOES-R Series funds of \$82,978,000 in FY 2006 for a total request of \$240,500,000. FY 2006 funding will begin engineering and activities for several key instruments and continue the imager production begun in FY 2005, all in support of a initial GOES-R launch date of October 2012. End-to-end system integration refers to the acquisition of an on-orbit satellite including the spacecraft, instruments, GOES unique communications services, and launch services; the command, control, and communications and product generation and distribution functions currently performed by Satellite Services; the archive and access of all data and products; and the user interface function providing data to critical users and forecasters. A single prime contract will be used to acquire the GOES-R end-to-end system. This end-to-end integration requires the acquisition, deployment, maintenance, and operations of the space and launch segments from FY 2012 through FY 2029.



GOES Infrared image of the western U.S., showing a storm over Texas

GOES provides an uninterrupted, continuous flow of data and information that meets customers' spatial, temporal and accuracy requirements, providing significant customer benefit within an established life-cycle cost target. NOAA defines requirements, manages, funds, implements system integration, procures ground segments and operates the GOES satellites. The National Aeronautics and Space Administration (NASA), as the agency with multi-disciplinary engineering expertise, works with NOAA to develop detailed system specifications, procure and launch the spacecraft, and manage system integration.

Polar-Operational Environmental Satellite Systems

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
POES	102,673	90,812	62,308	41,919	41,706

NOAA requests a decrease of \$3,073,000 and 0 FTE for the Polar-Operational Environmental Satellite Systems (POES) with a total request of \$102,673,000 for the continuation of the POES program. POES is nearing the end of its production with two remaining satellites to be launched. In September 2003, the second of the two remaining POES satellites, NOAA-N Prime, was involved in a serious accident at the contractor's facility. The damage has been assessed and estimated costs developed. Based upon the negotiated contract modification, NOAA-N Prime will be rebuilt to meet

a December 2007 launch date. POES provides daily global observations of weather patterns and environmental measurements of the Earth's atmosphere, its surface and cloud cover, and the proton and electron flux at satellite altitude. POES provides invaluable long-term data sets for climate monitoring and assessment.

National Polar-orbiting Operational Environmental Satellite Systems

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
NPOESS	320,998	341,275	343,862	297,224	373,871

NOAA is requesting an increase of \$16,097,000 and 0 FTE for a total request of \$320,998,000 for the National Polar-orbiting Operational Environmental Satellite Systems (NPOESS) continuation of the tri-agency NPOESS program that will replace POES. This request represents NOAA's share of the converged NOAA/DoD/NASA program. This request provides funding necessary to have the instruments and ground system in place to support a November 2006 launch of NPP and to have the first NPOESS satellite available for launch in FY 2010. FY 2006 funding will be used to complete the instruments planned to be flown on NPP and to complete the ground systems and algorithm necessary to acquire, process and distribute NPP data. These data are necessary for continuity of NASA's long-term climate data records and for early risk reduction and calibration and validation essential to the first NPOES satellite.

LANDSAT

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
LANDSAT	11,000	13,000	15,500	18,000	11,000

NOAA requests an increase of \$11,000,000 and 0 FTE to integrate LANDSAT sensors for incorporation on NPOESS satellites C1 and C4. NOAA, NASA, USGS will implement a continuity plan for LANDSAT. NOAA will be responsible for funding sensor integration, as well as future continuity of the data sets. USGS will develop the ground system necessary to process, archive, and distribute LANDSAT data.



NOAA Satellite being launched into space

NPOESS Data Exploitation

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
NDE	4,500	4,500	4,500	4,500	4,500

NOAA requests an increase of \$4,500,000 for the NPOESS Data Exploitation (NDE) project. NESDIS has the mandate to operate the Nation’s environmental satellites, collect environmental observations, process, distribute and archive data, and make available key data sets for both operations and research. The NDE component of the NPOESS Preparatory Project (NPP) consists of processing and distribution of NPOESS products and services once the data have been delivered to NOAA. NPOESS and NPP are part of a new environmental satellite program that promises to improve our observations of the earth, atmosphere, oceans and space environment. While the

NPOESS contract awarded by the Integrated Program Office in August of 2002 covers the delivery of two satellites and the option to purchase four more satellites, it does not include product processing and distribution to NOAA's users and customers. In order to realize the benefits of NPOESS data, NOAA must implement capabilities to process NPOESS data records into useful products that meet the requirements of NWS and other civilian users. For example, NDE will be able to derive carbon-based products such as Methane, Carbon Dioxide and Carbon Monoxide from NPOESS observations. These gases tend to mask the atmospheric temperature and humidity observations sensed by NPOESS. By producing a better estimate of these gases, NDE will help the NWS to remove biases and improve weather forecasts. NDE will also assist the NOAA Climate Office by providing global estimates of these greenhouse gases. The funding will start the development of the product generation and dissemination (PG&D) system in Suitland, Maryland. The PG&D system will include new hardware and software to process the NPOESS products. The first phase of hardware procurement will be two IBM scalable processors, or equivalent computers. The software component includes the creation and testing of code required to improve various product sets, and the design of software to facilitate the assimilation of NPOESS atmospheric sounding products into the NWS Numerical Prediction Models. The requested funding will also allow NOAA to study the communications links necessary to disseminate products and services to the user community.

Comprehensive Large Array Data Stewardship System (CLASS)

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
CLASS	6,541	6,541	6,541	6,541	6,541

NOAA requests no change to \$6,541,000 for the Comprehensive Large Array Data Stewardship System. CLASS will allow efficient management of high volumes of data that is critical to the climate, environmental and the scientific communities. NOAA's Researching Supercomputing goal is to provide a state-of-the-art scalable supercomputer and supporting infrastructure to advance modeling programs that are critical to NOAA's and the Nation's climate research.

Earth Observing System Data Archive and Access System Enhancement

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
EOS	1,000	1,000	1,000	1,000	1,000

NOAA is requesting a decrease of \$2,000,000 and 0 FTE for the Earth Observing System (EOS) Data Archive and Access System Enhancement. This decrease leaves a balance of \$1,000,000, sufficient to preserve the most critical NASA EOS data, which will be integrated into CLASS for archive and for access. NOAA is responsible for the stewardship of almost two petabytes of environmental data, which is expected to exceed 44 petabytes by 2011.

CONSTRUCTION

\$40,880,000

NOAA Center for Weather and Climate Prediction

Annual Funding Requirements

(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
NCWCP	8,500	22,900	10,700	0	0

NOAA requests an increase of \$6,200,000 and 0 FTE for a total of \$8,500,000 to finalize the design and implementation of the construction of the NOAA Center for Weather and Climate Prediction (NCWCP). The FY 2006 funding covers the critical long lead procurements for data and communications infrastructure that will be installed in the building during construction and for furnishings, fixtures and equipment that must be procured prior to the completion of construction. Lastly, the funding will be used for project management tasks supporting technical oversight of the design and construction process and the detailed planning necessary to execute the relocation of critical 24x7 operational systems without service interruption. The funding is critical to ensure project continuity for work initiated in FY 2004. Final occupancy of the NCWCP is scheduled for February 2008.

The NWS has had positive results from co-locating its facilities with academic institutions or laboratories in accelerating research into operations and in improving performance. This includes accelerated use of global satellite data through state-of-the-art data assimilation systems; improved model forecasts; decreased time to infuse new science into operations from 7-10 years to 1-3 years

NCWCP is a new facility to replace the current World Weather Building with a new state-of-the-art facility to meet the operational requirements of the National Centers for Environmental Prediction (NCEP), the National Environmental Satellite, Data, and Information Service (NESDIS) Office of Research and Applications and Satellite Services Division, and the Office of Oceanic and Atmospheric Research (OAR) Air Resources Laboratory. FY 2004 funding for the NCWCP enabled NOAA to support the General Services Administration to award a build-to-suit lease for the NOAA NCWCP during FY 2004 and includes necessary "above standard" construction costs. The FY 2005 lease award for NCWCP will ensure occupancy of the new facility by 2008 when the current World Weather Building lease expires.

Weather Forecast Offices
Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
WFO	13,630	13,630	13,630	13,630	13,630

NOAA requests an increase of \$630,000 for a total of \$13,630,000 and 0 FTE for the Weather Forecast Office (WFO) Construction, to meet NWS WFO facility requirements. WFO construction, part of the NWS modernization and associated restructuring, was started in the 1980s. Required construction elements currently ongoing include the upgrade and modernization of Alaska and Pacific Region Weather Service Offices, Tsunami Warning Centers, and associated employee housing units, upgrades of Heating, Ventilation, and Air Conditioning (HVAC) systems, uninterruptible power supply replacements, and mitigation of all building and fire code violations. This construction effort is essential to bring the NWS into full compliance with federal law and municipal codes. In FY 2006 WFO Construction will focus on continuing to modernize the Alaska and Pacific Region facilities, as well as HVAC upgrades and correcting safety code violations at facilities.

National Estuarine Research Reserve System
Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
NERRS	7,250	7,250	7,250	7,250	7,250

NOAA requests an increase of \$250,000, for a total of \$7,250,000, for discretionary National Estuarine Research Reserve System (NERRS) construction and land acquisition projects. This increase will maintain the level of funding needed to support this Federal-state partnership designed to protect and understand valuable estuarine resources through research and education. The facilities and land of the reserves are owned and managed by the states in this Federal-state partnership. Federal funds are matched 50:50 for land acquisition and 70:30 for construction projects (Federal/state funds). The land acquisition projects will provide greater protection to reserve resources. The construction projects include interpretive centers, reserve research facilities, educational exhibits, and boardwalks or trails. Having adequate facilities makes a considerable difference in the quality of research, education, outreach and resource protection programs that can be conducted at the reserves.

The NERRS is a Federal-state partnership designed to protect and understand valuable estuarine resources through research and education. Reserves are publicly owned lands and onsite facilities that provide opportunities for researchers as well as the public to better understand these estuarine areas. Supplementing or updating facilities at the 26 reserves will be carried on in conjunction with the development of system-wide construction plans. All construction activities are carried out based on the current needs for implementing core NERRS program and external opportunities for partnerships. When it is available, reserves will acquire additional, previously identified near-by critical habitat to increase protection and provide places for conducting long-term science, education, and demonstration programs. The facilities and land of the reserves are owned and managed by the states in this Federal-state partnership.

National Marine Sanctuaries

Annual Funding Requirements

(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
NMS	7,250	7,250	7,250	7,250	7,250

NOAA requests an increase of \$2,250,000, for a total of \$7,250,000, for discretionary National Marine Sanctuary (NMS) construction projects in FY 2006. The FY 2006 Sanctuary program will continue efforts on many of the projects begun in prior years, and address operational facility requirements and small outreach efforts, i.e., exhibits. The NMS program will continue to implement a comprehensive facilities plan that prioritizes needs and opportunities at individual sites for constructing sanctuary visitor centers, collaborative education projects and operational needs. These facilities serve as important windows into the resources of the sanctuaries, since most of these special marine environments are offshore and not easily accessible by many visitors. Whenever possible, sanctuaries utilize existing aquaria, museums, and other appropriate facilities to develop cooperative centers, where the public and environmental decision makers can gain direct, objective and focused information on major conservation issues.

Galveston Laboratory Renovation

Annual Funding Requirements

(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
Galveston Laboratory Renovation	2,000	0	0	0	0

NOAA requests no change to \$2,000,000 for the National Marine Fisheries Service construction activities at the Galveston Laboratory. This represents the last funding increment needed to rehabilitate the Galveston Laboratory buildings 301, 303, 305, 306 and 307.

Satellite CDA Facilities

Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007 Estimate</u>	<u>FY2008 Estimate</u>	<u>FY2009 Estimate</u>	<u>FY2010 Estimate</u>
Satellite CDA Facilities	2,250	2,250	2,250	2,250	2,250

NOAA requests no change to the \$2,250,000 and 0 FTE for the Satellite Command and Data Acquisition (CDA) Facilities. NOAA’s CDA Infrastructure program at the Wallops and Fairbanks facilities is to ensure continuation of the current 99.9 percent data availability for NOAA environmental satellite systems. The Wallops and Fairbanks facilities and infrastructure are over 40 years old. Major systems at both facilities are operating well past their design lives and require maintenance, repair, and in many cases, replacement. The Fairbanks facility is located in a seismic zone and operates in severe Sub-Arctic conditions, with temperatures routinely reaching minus 60 degrees Fahrenheit during the winter months. The Wallops facility, on the Atlantic coast, is subject to a corrosive salt air environment and lies in the path of hurricanes that hit the US East Coast. Both stations have been determined to be critical national infrastructure elements by Presidential Decision Directive.

NOAA has partnered with the U.S. Army Corps of Engineers and developed facilities master plans for Wallops and Fairbanks facilities. NOAA will incrementally implement the facilities master plans to support a phased, multi-year program to comprehensively renovate and modernize the facilities, infrastructure, and equipment to minimize or eliminate safety, hazardous materials, waste water treatment, and other deficiencies at the facilities that could lead to outages and service disruptions caused by failure of supporting infrastructure at the stations.

NOAA requests a decrease of \$11,255,000 and 0 FTE for the Suitland Facility, leaving no funding in FY 2006.

FLEET**\$35,730,000****Fleet Upgrades**Annual Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
Fleet Upgrades	3,230	0	0	0	0

NOAA requests an increase of \$1,430,000 and 0 FTE with total funding of \$3,230,000 for the McARTHUR II, NANCY FOSTER, and OSCAR ELTON SETTE Upgrades, which began in FY 2005. FY 2006 funding will complete the mission space upgrades initiated in FY 2005. McARTHUR II is home ported in Seattle, Washington, and supports NOS and NMFS missions along the West Coast. Upgrades to McARTHUR II's laboratory spaces will better support the needs of embarked scientists by providing the work areas with appropriate laboratory design and facilities to conduct their research efficiently and to store and assemble mission related equipment.

The NANCY FOSTER upgrades for FY 2006 will include a winch and wire, an additional small boat, and the second phase of outfitting the labs. NANCY FOSTER is home ported in Charleston, South Carolina, and supports NOS, OAR and NMFS missions along the Atlantic coast and Gulf of Mexico.

The OSCAR ELTON SETTE upgrades include modifications to laboratory spaces and the ventilation system, a Miranda davit, and a small boat. The upgrades will enable NMFS, NOS, and OAR to collect data for fisheries management and marine mammal protection and data on coral reefs, marine sanctuaries, National Estuarine Research Reserves (NERRS), ocean exploration, and oceanography. OSCAR ELTON SETTE is home ported in Honolulu, Hawaii, and operates throughout the central and western Pacific.



OSCAR ELTON SETTE backed by a volcano in the Hawaiian archipelago

Fisheries Survey Vessel #4

Outyear Funding Requirements
(BA in Thousands)

	<u>FY2006</u>	<u>FY 2007</u> <u>Estimate</u>	<u>FY2008</u> <u>Estimate</u>	<u>FY2009</u> <u>Estimate</u>	<u>FY2010</u> <u>Estimate</u>
FSV-4	32,500	12,800	0	1,000	0

NOAA requests an increase of \$32,500,000 and 5 FTE with a total of \$32,500,000 for Fisheries Survey Vessel Replacement #4 (FSV-4). This vessel is required to collect fish stocks data and data necessary to protect marine mammals. The requested funding will enable NOAA to exercise an option for the fourth ship on the existing four-ship contract, thereby retaining current pricing. FSV-4 will deploy state-of-the-art acoustic technologies, combined with very quiet radiated-noise signature, to enhance the effectiveness and efficiency of at-sea resource surveys. There are no charter vessels that can provide this acoustically quiet capability. These capabilities would enable FSV-4 to monitor up to nine times more volume of water for the same time and distance traveled by NOAA's current ships. FSV-4 would fully support NMFS' new FETCH Autonomous Underwater Vehicle to extend survey sampling beyond the trackline of the ship. FSV-4 is scheduled to support both the Northwest and Southwest Fisheries Science Centers (NWFSC and SWFSC). The NWFSC is responsible for managing Pacific whiting, which is the largest West Coast fishery and generates nearly \$30M annually. FSV-4 is also

needed for ocean habitat investigations on ESA-listed Pacific salmon, southern resident killer whales, and highly migratory species (sharks, tunas, and billfish). A GAO review of NMFS' West Coast Groundfish Program (June 2004) validated the highest priority for FSV4 to expand data collection for more comprehensive assessments of over 82 groundfish species.

Fisheries Survey Vessel #3

\$0

NOAA is requesting decreases of \$33,513,000 and 5 FTE for Fisheries Survey Vessel Replacement #3 (FSV-3), leaving no funding, as sufficient funds have been appropriated to complete this vessel.

AIRCRAFT

\$0

NOAA is requesting a decrease of \$1,420,000 and 0 FTE for Required Safety and Regulatory Upgrades to Various Aircraft. This project has been completed, and no funds are required in FY 2006.



One of NOAA's two WP-3D "Hurricane Hunter" aircraft

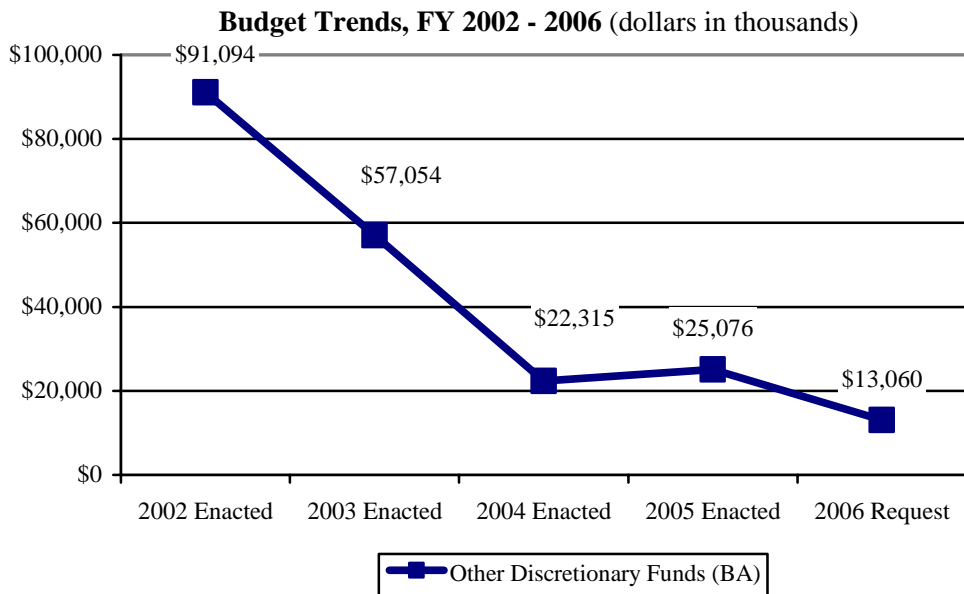
Chapter 6

Other Accounts



Other Discretionary Funds

(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
Other Discretionary Funds				
Coastal Zone Management Fund	\$0	\$0	\$0	\$0
Fisherman's Contingency Fund	492	0	0	0
Foreign Fishing Observer Fund	0	0	0	0
Fisheries Finance Program Account	1,368	0	60	60
Promote and Develop American Fisheries	-65,000	-77,000	0	-77,000
Pacific Coastal Salmon Recovery Fund	88,216	90,000	0	90,000
Total Other Discretionary Funds (Budget Authority - BA)	\$25,076	\$13,000	\$60	\$13,060
Total FTE	1	1	0	1





Other Discretionary Funds



NOAA's other discretionary funds are a significant part of NOAA's ecosystem-based management of coastal and ocean resources. These funds address threatened and endangered species, promote biodiversity, contribute to the improvement of ocean science, and promote fisheries research.

Coastal Zone Management Fund

The Coastal Zone Management Fund (CZMF) was created in 1990, to reimburse NOAA for expenses incident to the administration of the Coastal Zone Management Act. CZMF was intended to issue grants to states for improving coastal zone management. Emphasis was placed on planning for unforeseen or disaster-related circumstances and recognition of excellence in coastal management. NOAA will continue to work with Congress to reauthorize the Coastal Zone Management Act.

Fishermen's Contingency Fund

The Fishermen's Contingency Fund (FCF) program minimizes financial instability of the fishing industry caused by competing uses of the Outer Continental Shelf (OCS), and provides for timely resolution of claims by vessel owners. The Fishermen's Contingency Fund is authorized under Section 402 of Title IV of the Outer Continental Shelf Lands

Act Amendments of 1978. NOAA compensates U.S. commercial fishermen for damage or loss of fishing gear, vessels, and resulting economic loss caused by obstructions related to oil and gas exploration, development, and production in any area of the Outer Continental Shelf. The funds used to provide this compensation are derived from fees collected on an annual basis by the Secretary of the Interior from the holders of leases, exploration permits, easements, or rights-of-way in areas of the Outer Continental Shelf. FCF account is funded totally through user fees. Disbursements can be made only to the extent authorized in appropriation acts.

Foreign Fishing Observer Fund

The Foreign Fishing Observer Fund (FFOF) is financed through fees collected from owners and operators of foreign fishing vessels fishing within the Exclusive Economic Zone (EEZ) of the United States (such fishing requires a permit issued under the Magnuson-Stevens Fishery Conservation and Management Act). This includes long-line vessels fishing in the Atlantic billfish and shark fishery and other foreign vessels fishing in the EEZ. FFOF reimburses NOAA for costs incurred in placing observers aboard foreign fishing vessels. The observer program is conducted primarily through contracts with the private sector. NOAA/NMFS places these observers aboard foreign fishing vessels to monitor compliance with U.S. fishery laws and to collect fishery management data.



Green Sea Turtle

Amounts available in the Fund can be disbursed only to the extent and in amounts provided in appropriation acts. In FY 1985 Congress approved the establishment of a supplemental observer program. The program provided that foreign vessels without

Federally-funded observers are required to obtain the services of private contractors certified by the Secretary of Commerce. Unobligated balances are sufficient to provide observer coverage aboard foreign vessels fishing within the United States' EEZ in FY 2006.

Fisheries Finance Program Account

The Fisheries Finance Program (FFP) Account provides direct loans that promote building sustainable fisheries. This account was established in FY 1997 to cover the cost of financing direct loans as authorized by Title XI of the Merchant Marine Act of 1936. The President's Request proposes loan levels of \$5 million for individual fishing quotas, and \$18.9 million for a proposed Atlantic pelagic longline swordfish buyback program. Budget Authority of \$60,000 is requested to fund the subsidy costs associated with these loans. The re-authorization of the Magnuson-Stevens Fisheries Conservation and Management Act in October 1996 changed the program to provide direct loans rather than loan guarantees previously made under the Fishing Vessel Obligation Guarantee appropriation.

Promote and Develop Fisheries Products

The Promote and Develop Fisheries Products (PDFP) account makes grants for fisheries research and development projects. Funds are derived from a Department of Agriculture transfer to NOAA from duties on imported fisheries products. An amount equal to 30% of these duties is made available to NOAA, subject to appropriation limitations. The PDFP grants program has provided substantial assistance to address impediments in the management, development, and utilization of the Nation's living marine resources. ORF expenses related to PDFP support are reimbursed from the PDFP account.

Pacific Coastal Salmon Recovery Fund

The Pacific Coastal Salmon Recovery Fund (PCSRF) was established to augment state, tribal and local programs to conserve and restore sustainable Pacific salmon populations and their habitats. The FY 2006 funds are to be used by the states of California, Oregon, Washington, Alaska, Idaho and the Pacific Coastal and Columbia River Tribes to supplement state and federal programs and promote the development of federal-state-tribal-local partnerships in salmon conservation efforts. The state and tribes will use these funds for projects necessary for restoration of salmon and steelhead populations that are listed as threatened or endangered, or identified by a State as at-risk to be so-listed, for maintaining populations necessary for exercise of tribal treaty fishing rights or native subsistence fishing, or for conservation of Pacific coastal salmon and steelhead habitat. Funds provided to the states will have a matching requirement of at least 25% of total costs. Funds provided to Pacific Coastal and Columbia River Tribes do not require matching dollars.

Other Discretionary Funds ADJUSTMENTS TO BASE:

NOAA requests a net decrease of \$12,076,000 distributed as follows:

- A decrease of \$492,000 for the Fishermen's Contingency Fund;
- A decrease of \$1,368,000 for the Fisheries Finance Program Account;
- A decrease of \$12,000,000 for Promote and Develop Fisheries; and
- An increase of \$1,784,000 for the Pacific Coastal Salmon Recovery Fund.

OTHER DISCRETIONARY FUNDS PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

NOAA requests FY 2006 funding at \$13,060,000. The funding includes a program increase of \$60,000 in the Fisheries Finance Program Account, for an Atlantic pelagic longline swordfish buyback. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits – Control Table*. Descriptions of each request by line item are located in the NOAA FY 2006 Technical Budget.

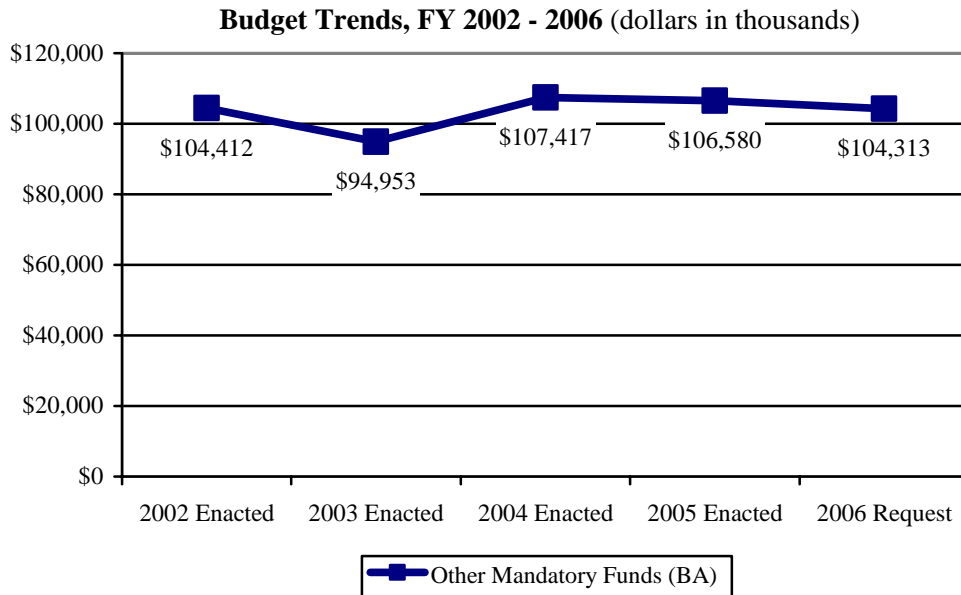


[This Page Intentionally Left Blank.]



Other Mandatory Funds

(Dollars in Thousands)	FY 2005 Enacted	FY 2006 Base	Program Changes	Total Request
Other Mandatory Funds				
Coastal Zone Management Fund	-\$3,000	-\$3,000	\$0	-\$3,000
Damage Assessment & Restoration Revolving Fund	1,000	1,000	0	1,000
Promote and Develop American Fisheries Products	77,539	77,539	0	77,539
Fisheries Finance Program Account	5,144	0	0	0
Environmental Improvement & Restoration Fund	4,689	6,636	0	6,636
Limited Access System Administration Fund	3,634	3,634	0	3,634
NOAA Corp Commissioned Officers Retirement	17,574	18,504	0	18,504
Total Other Mandatory Funds (Budget Authority - BA)	\$106,580	\$104,313	\$0	\$104,313
Total FTE	20	20	0	20





Other Mandatory Funds



Coastal Zone Management Fund

The Coastal Zone Management (CZM) Fund was established under the Omnibus Budget Reconciliation Act of 1990 (P.L. 101-508) to receive repayments from the coastal energy impact program. These payments are used for CZM programs and administration as authorized by section 308 of the Coastal Zone Management Act, and will offset CZM administration costs in the ORF account. In FY 2006, NOAA proposes to continue the transfer of authorized funding in the CZM Fund to the ORF account for obligation to facilitate operation of the Fund.

Damage Assessment & Restoration Revolving Fund

The Damage Assessment and Restoration Revolving Fund (DARRF) was established in 1990 to facilitate oil and hazardous material spill response, damage assessment and restoration activities for damages to natural resources for which NOAA serves as trustee. The Fund receives proceeds from claims against responsible parties, as determined through court settlements or agreements. In FY 1999 and prior years, funds were

transferred to the Operations, Research and Facilities account for the purposes of damage assessment and restoration. Beginning in FY 2000, funds were expended in DARRF and treated as mandatory budget authority. Receipts from the settlements are expected to be \$2.0 million in FY 2006.

DARRF facilitates and sustains: (1) oil and hazardous materials contingency planning and response, automated spill assessment, and countermeasure capabilities; (2) natural resource damage assessment while the Departments of Commerce and Justice seek full reimbursement from potentially responsible parties; and (3) restoration, replacement or acquisition of the equivalent of injured or lost natural resources, including resources of National Marine Sanctuaries and National Estuarine Research Reserves, tidal wetlands and other habitats, for which NOAA is trustee. To fulfill its responsibility as a Federal trustee for living natural resources under the Superfund, Clean Water, and Oil Pollution Acts, NOAA conducts comprehensive assessments of damages to trust resources from discharges of oil or releases of hazardous substances in coastal and marine areas. DARRF uses recovered damages to restore injured resources, monitors the restoration to assess its effectiveness, conducts basic and applied research on restoration methodologies, applies these techniques to restoration of resource habitats, and provides guidance to habitat managers for selecting among restoration approaches.



Oil spill cleanup and restoration

As the scientific support coordinator to the U.S. Coast Guard's Federal on-scene coordinator at coastal and marine spills of oil and hazardous materials, NOAA provides critical information on spill trajectory, chemical hazard analyses, and assessments of the sensitivity of marine and estuarine habitats. The program's substantial involvement in response activities related to the Exxon Valdez oil spill continues. The program provides similar support to the environmental hazardous waste sites in coastal areas.

Promote and Develop American Fishery Products & Research Pertaining to American Fisheries Fund

The American Fisheries Promotion Act of 1980 authorized a grants program for fisheries research and development projects to be carried out with funds derived from the import duties the Department of Agriculture collects on fishery-related products. 30 percent of these duties go towards the Promote and Develop American Fishery Products & Research Pertaining to American Fisheries Fund. The FY 2006 budget estimate is \$77.5 million. Of this amount, \$0.539 million will be used for the grants program to promote industry development through competitively-awarded external grants for innovative research and development of projects in the fishing industry and for internal research that complements the external program. The remaining \$77 million will be transferred to offset marine fishery resource programs in the Operations, Research and Facilities appropriation in FY 2006. This program supports the NOAA strategic plan goal to build sustainable fisheries.

Fisheries Finance Program Account

All Fisheries Finance Program Account (FFP) Account authority is subject to the Federal Credit Reform Act of 1990 (FCRA) (2 U.S.C. 661). The FCRA requires estimated loan losses (FCRA cost) be appropriated in cash at the time Congress authorizes annual credit ceilings. FFP Account loan activity demonstrates that no FCRA subsidy cost need be funded in FY 2006. Statutory authority is found in 46 U.S.C. 1274 and 16 U.S.C. 1801 et seq. FFP Account lending guidelines are found at Title 50 Code of Federal Regulations (CFR) part 253, subpart B; and tempered by NOAA's sustainable fisheries policy and by the practical considerations of a program that has been self-sustaining throughout its credit history.

Environmental Improvement & Restoration Fund

The Environmental Improvement and Restoration Fund (EIRF) was established by Title IV of P.L. 105-83, the Department of the Interior and Related Agencies Appropriations Act, 1998, to fund marine research activities in the North Pacific. Twenty percent of the interest earned from this fund is made available to the Department of Commerce. The Fund issues grants to Federal, State, private or foreign organizations or individuals to conduct research activities on or relating to fisheries or marine ecosystems in the North Pacific Ocean, Bering Sea, and Arctic Ocean. Research priorities and grant requests are reviewed and approved by the North Pacific Research Board with emphasis placed on cooperative research efforts designed to address pressing fishery management or marine ecosystem information needs. This program supports the NOAA strategic plan goal to sustain healthy coasts.

Limited Access System Administration Fund

The Limited Access System Administration Fund (LASAF) fund was established by Title III of Public Law 104-297. Fee Collections equaling no more than one-half percent of the proceeds from the sale or transfer of limited access system permits are deposited into the Fund. These deposits into the Fund are used to administer an exclusive central registry system for the limited access system permits.

Under the authority of the Magnuson-Stevens Act Section 304(d)(2)(A), NMFS must collect a fee to recover the costs of managing and enforcing the Individual Fishing Quota (IFQ) Halibut/Sablefish program. Funds collected under this authority are deposited into the Limited Access System Administration Fund. Of the funds collected, seventy-five percent of fee payments are to be made available to the Secretary to offset costs of management and enforcement of the halibut and sablefish IFQ program and 25 percent of fees collected are to be made available for appropriation to support the North Pacific IFQ loan program.

NOAA Corp Commissioned Officers Retirement

The retirement system for the uniformed services provides a measure of financial security after release from active duty for service members and their survivors. It is an important factor in the choice of a career in the uniformed services and is mandated by Federal statutes under Title 10, United States Code. NOAA transfers retirement pay funds to the Coast Guard, which handles the payment function for retirees and annuitants. Health care funds for non-Medicare-eligible retirees, dependents, and annuitants are transferred to the U.S. Public Health Service, which administers the health care program.

OTHER MANDATORY FUNDS - ADJUSTMENTS TO BASE:

NOAA requests a net decrease of \$2,267,000 for ATBs, distributed as follows:

- A decrease of \$5,144,000 for the Fisheries Financing Program Account;
- An increase of \$1,947,000 for the Environmental Improvement and Restoration Fund; and,
- An increase of \$930,000 for NOAA Corp Commissioned Officers Retirement.

OTHER MANDATORY FUNDS - PROGRAM CHANGE HIGHLIGHTS FOR FY 2006:

NOAA requests total funding of \$104,313,000 in FY 2006. Detailed numeric breakouts are located in Chapter 7, *Special Exhibits –Control Table*. Descriptions of each request by line item are located in the NOAA FY 2006 Technical Budget.

There are no program changes for Other Mandatory Accounts in FY 2006.

Chapter 7

Special Exhibits

Summary by Appropriations
(Dollars in thousands)

FEDERAL FUNDS : Appropriation	2004 Actual	2005 Enacted	2006 Estimate	Increase/ (Decrease)
Operations, Research, and Facilities (ORF)	2,655,904	2,782,644	2,528,168	(254,476)
Procurement, Acquisition, and Construction (PAC)	985,772	1,043,165	965,051	(78,114)
Coastal Zone Management Fund	0	2,960	3,000	40
Coastal Impact Assistance Fund	0	0	0	0
Fisherman's Contingency Fund	0	492	0	(492)
Foreign Fishing Observer Fund	0	0	0	0
Fisheries Finance Program Account	989	629	60	(569)
Pacific Coastal Salmon Recovery	89,052	88,798	90,000	1,202
TOTAL APPROPRIATION	\$3,731,717	\$3,918,688	\$3,586,279	(\$332,409)
TRANSFERS				
<u>Operations, Research, & Facilities</u>				
FROM: Promote & Develop Fishery Products	62,000	65,000	77,000	12,000
Coastal Zone Management Fund	0	2,960	3,000	40
Pacific Coastal Salmon Recovery	4,452	89	0	(89)
Procurement, Acquisition, and Construction	1,420	1,043	0	(1,043)
Fisheries Finance Program Account	0	1	0	(1)
Department of Defense- Navy	0	18,000	0	(18,000)
TO: Procurement, Acquisition, and Construction	(1,624)	0	0	0
Fisheries Finance Program Account	0	(247)	0	247
Marine Mammal Commission	(1,194)	0	0	0
Subtotal, ORF	65,054	86,846	80,000	(6,846)
<u>Coastal Zone Management Fund</u>				
TO: Operations, Research and Facilities	0	(2,960)	(3,000)	(40)
<u>Pacific Coastal Salmon Recovery</u>				
TO: Fisheries Finance Program Account	0	(493)	0	493
TO: Operations, Research and Facilities	(4,452)	(89)	0	89
Subtotal, PCSR	(4,452)	(582)	0	582
<u>Procurement, Acquisition & Construction</u>				
TO: Operations, Research and Facilities	(1,420)	(1,043)	0	1,043
FROM: Operations, Research and Facilities	1,624	0	0	0
<u>Fisheries Finance Program Account</u>				
TO: Operations, Research and Facilities	0	(1)	0	1
FROM: Pacific Coastal Salmon Recovery	0	493	0	(493)
FROM: Operations, Research and Facilities	0	247	0	(247)
Subtotal, FFPA	0	739	0	(739)
<u>Promote & Develop American Fishery Products (P&D)</u>				
TO: ORF	(62,000)	(65,000)	(77,000)	(12,000)
FROM: Department of Agriculture	79,724	77,539	77,539	0
Subtotal, P&D	17,724	12,539	539	(12,000)
TOTAL, TRANSFERS	\$78,530	\$95,539	\$77,539	(\$18,000)
Unobligated Balances, Rescission	(51,510)	0	0	0
OTHER ACCOUNTS				
Damage Assessment & Restoration Revolving Fund	1,334	1,000	1,000	0
Fisheries Finance Program Account	2,897	5,144	0	(5,144)
Environmental Improvement and Restoration Fund	5,305	4,689	6,636	1,947
CZMF Mandatory Offsetting Collections	(2,305)	(3,000)	(3,000)	0
NOAA Corps Retirement Pay	17,151	17,574	18,504	930
Limited Access System Administration	3,311	3,634	3,634	0
TOTAL BUDGET AUTHORITY	\$3,786,430	\$4,043,268	\$3,690,592	(\$352,676)
Less Mandatory Funds	(107,417)	(106,580)	(104,313)	2,267
TOTAL DISCRETIONARY BUDGET AUTHORITY	\$3,679,013	\$3,936,688	\$3,586,279	(\$350,409)

Adjustments to Current Programs (Adjustments to Base) – requested \$74,870,000:

Adjustments to Base (ATBs) are defined as increases or decreases to *specific object classes* that:

1. Represent the *same level of effort* as the current budget year,
2. Are *outside of the agency management’s control*,
3. Are supported by *specific documentation*, and
4. Are a *known cost* (or fixed cost of doing business).

In recent years, many organizations have experienced the price that is paid if an agency does not focus significant effort on ensuring that ATBs are funded in each year’s budget. The impact of inflation, as well as changes in costs for salaries, good and services (especially in technical and scientific fields), among others, can have a significant impact on the operation of an agency. Failure to obtain ATBs means that the buying power of appropriated funding is incrementally reduced, year by year.

With this in mind, NOAA has requested the following in labor-related and non-labor ATBs:

(Dollars in Millions)

	Labor-related (Salary & Benefits)	Non-labor (Other Object Classes)	Total
NOS	\$3.1	\$1.8	\$4.9
NMFS	6.8	6.8	13.6
OAR	2.4	3.3	5.7
NWS	13.3	3.7	17.0
NESDIS	1.8	3.1	4.9
PPI	0.0	0.0	0.0
Program Support	2.9	4.1	7.0
ORF/PAC – Total	30.3	22.8	53.1
Restored Rescissions			35.7
Technical ATBs, Adjustments & Transfers			-13.9
Total Appropriated (Budget Authority) ATBs	\$30.3	\$22.8	\$74.9

ATBs requested by NOAA for all its activities will fund the agency’s overall anticipated adjustments to the current programs. Funds are included that will provide the estimated FY 2006 Federal pay raise of 2.3 percent and annualize the FY 2005 pay raise of 3.5 percent. It will also fund inflationary increases for non-labor activities, including service contracts, utilities, field office lease payments, and rent charges from the General Services Administration.

FY 05 PROPOSED TERMINATIONS Operations, Research and Facilities	FY 2005 Unrequested Funding
NATIONAL OCEAN SERVICE	(\$ in Thousands)
Chesapeake Bay	986
Aerial	986
EEZ Outer Continental Shelf Ocean Bottom Claims	2,168
Gulf of Alaska	2,463
North Pacific	986
North Pacific Maritime Boundary Line	986
MS/LA Digital Coast	789
Height Modernization Regional Expansion -TX	739
Height Modernization Study - MS	591
Geodetic Survey- KY	493
Geodetic Survey- LA	490
Geodetic Survey - WI	2,957
Geodetic Survey - WA	493
Geodetic Survey - AL	1,971
Great Lakes NWLON	1,971
Alaska Current & Tide Data	1,479
Coastal Observation Technology System	2,146
Coastal Ocean Research & Monitoring Program	2,438
NOAA ICOOS	7,392
NOAA/UNH Joint Ocean Observing Technology Center	3,942
Gulf of Alaska Ecosystem Monitoring	1,971
Gulf of Maine Observing System	1,873
Long Island Sound Observing System	986
Central Gulf of Mexico Observing System (USM)	1,971
So Cal Coastal Ocean Observing System (Scripps)	1,479
Alliance for Coastal Technologies	2,463
Center for Coastal Ocean Observation and Analysis	2,463
Carolina Coastal Ocean Observing and Prediction System	2,463
Wallops Ocean Observation Project	1,971
Coastal Ocean Monitoring Network for West Florida	739
Cook Inlet Coastal Monitoring and Habitat	986
Seacoast Science Center	986
EE Jusi Environmental Institute	739
Coastal Change Analysis	493
Lake Pontchartrain	1,479
CREST	444
CI-CORE	2,463
Aquatic Research Consortium MS	2,463
Hawaii Coral Reef Initiative	1,479
Nat'l Coral Reef Initiative - Florida	986
Coral Reef - Puerto Rico	493
National Fish and Wildlife Foundation - NFWF	689
Ocean Health Initiative	17,742
Monterey Bay Watershed	493
Mitigating Coastal Development Impacts/MS State Univ.	986
Marine Wildlife Noise Impacts / Univ of RI	98
Marine Debris	4,928
Marine Debris Removal - Alaska	1,183
Marine Debris Removal - SC	197
Aquatic Resources Environmental Initiative	4,928
Vieques	986
Center for Marine Spill Response Project	1,971
Non-point Pollution Implementation Grants	2,957
Marine Sanctuary Foundation / Ocean Activity Fund	4,928
Northsat Hawaiian Islands Rsrch / HI Institute of Marine Biology	1,479
Northwest Straits Citizens Advisory Commission	1,232
Payment to OMAO	2,753
Pacific Coastal Services Center	1,318
TOTAL NOS	116,724
NATIONAL MARINE FISHERIES SERVICE	
Other fisheries-related projects:	16,214
Center for Marine Education and Research (MS)	2,957
Other Projects	17,076
TOTAL NMFS	36,247
OCEANIC and ATMOSPHERIC RESEARCH	
Accelerating Climate Models - IRIS	1,478
Central CA Ozone Study	247
East Tennessee Ozone Study	296
Climate System Research Center	739
Intl Council for Local Environmental Initiatives	492
Climate and Environmental Change	2,438
Univ of AL Huntsville Climate Research	986

FY 05 PROPOSED TERMINATIONS Operations, Research and Facilities	FY 2005 Unrequested Funding
Abrupt Climate Change Research	487
Targeted Wind Sensing	1,971
New England Air Quality Study	1,971
NE Center for Atmospheric Science and Policy	1,479
Inst. for Study of Earth, Oceans & Space (Air-Map - CCRC)	4,930
Risk Reduction in Water Forecasts (MSU)	1,971
Remote Sensing Research (ISU/BCAL)	487
STORM (U. of N. Iowa)	640
Fish Extension	1,478
Aquatic Nuisance Species/Zebra Mussel Research	986
Gulf of Mexico Oyster Initiative	986
Marine Invasive Species Program	247
Oyster Disease Research	986
National Institute for Undersea Science and Technology	4,928
NMNH East Wing (Oceans)	4,928
Submersible Micro-technology Research	969
Aquatic Ecosystems - Canaan Valley Institute	4,239
Institute for Science Technology and Public Policy	887
Atmospheric Dispersion Forecasting / Jackson State Univ.	986
Great Lakes Toxicity	488
Gulf of Maine Council	739
Lake Champlain Research Consortium	345
NISA/Ballast Water Demonstrations	3,450
NISA/Alaska	1,479
Cooperative Institute for New England Mari-culture and Fisheries	2,957
NH Center for the Study of Lakes and Ecosystems	492
Cooperative Sensor Development Lab for Oceans & Climate	492
Aquaculture Education Program - Cedar Point MS	1,774
Pacific Tropical Ornamental Fish	492
Payment to OMAO	98
TOTAL OAR	55,038
NATIONAL WEATHER SERVICE	
Tsunami Warning & Environmental Obs for AK (TWEAK)	1,971
HI Data Bouys	247
Hurricane Mitigation Alliance (SUSF)	3,203
Red River Basin Institute / Decision Info Network	267
New England Weather Technology Initiative	542
NOAA Profiler Network	3,155
NC Flood Plain Mapping Pilot	584
Vermont Northeast Weather & Wind Data Integration	247
NOAA Weather Radio Transmitters - HI	197
Payment to OMAO	468
TOTAL NWS	10,881
NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE	
Research to Ops/Satellite Oceanography	3,942
GPS Interagency Board	247
GOES Data Archive Project	2,437
Regional Climate Centers	2,464
International Pacific Research Ctr (U of H)	1,971
Pacific Ocean and Environmental Info Center	986
Payment to OMAO	328
TOTAL NESDIS	12,375
PROGRAM SUPPORT	
Ocean Science Bowl	986
JASON Education and Outreach	2,463
Bay Watersheds Education & Training Program	2,463
BWET Hawaii	1,478
Narragansett Bay Marine Education (Save the Bay)	493
OE and NOAA Corps Pay Differential	1,971
CAPABLE (transfer from DOD)	18,000
TOTAL PROGRAM SUPPORT	27,854
GRAND TOTAL ORF	259,119
PROCUREMENT, ACQUISITION AND CONSTRUCTION	167,956
GRAND TOTAL ALL	427,075

NOAA MARINE AND AVIATION OPERATIONS

Planned Fiscal Year 2006 Operating Days of Ship Support for NOAA Programs

Operating days are days that a ship is away from home port and engaged in a project including days in any port other than home port or days transiting to or from a project. Days at sea are days that a ship is at sea engaged in a project or days transiting to or from a project.

The private sector and University National Oceanographic Laboratory System (UNOLS) ships generally track operating days rather than days at sea, so all days in the table below, including in-house ships days, are operating days. Operating days are typically 10 to 15 percent higher than days at sea.

	<u>Operating Days</u>		<u>Dollars in Millions</u>	
<u>In-house</u>	4,160		\$ 86.7	Operations
			\$ 13.1	Fleet Planning & Maint.
	-----		-----	
<i>In-house subtotal</i>	4,160		\$ 99.8	
<u>Outsourced</u>				
Private Sector	4,040		\$21.6	
UNOLS	775		\$13.4	
Time Charter	330		\$11.0	
Contracts for hydro- graphic data	*		\$20.0	
	-----		-----	
<i>Outsourced subtotal</i>	5,145**		\$66.0**	
	=====		=====	
Grand Total	9,305		\$165.8	

* Operating-day-equivalent information is not applicable due to the manner in which hydrographic-survey services are obtained.

** Totals for outsourcing are approximate. Outsourced subtotal does not include an operating-day-equivalent number for hydrographic-services contracts.

NOAA MARINE AND AVIATION OPERATIONS

Planned Fiscal Year 2006 Operating Days of Ship Support for NOAA Programs

	<u>Operating Days</u>	<u>Percentage</u>
<i>In-house subtotal</i>	4,160	45%
<i>Outsourced subtotal</i>	5,145 *	55%
	=====	=====
Total	9,305	100%

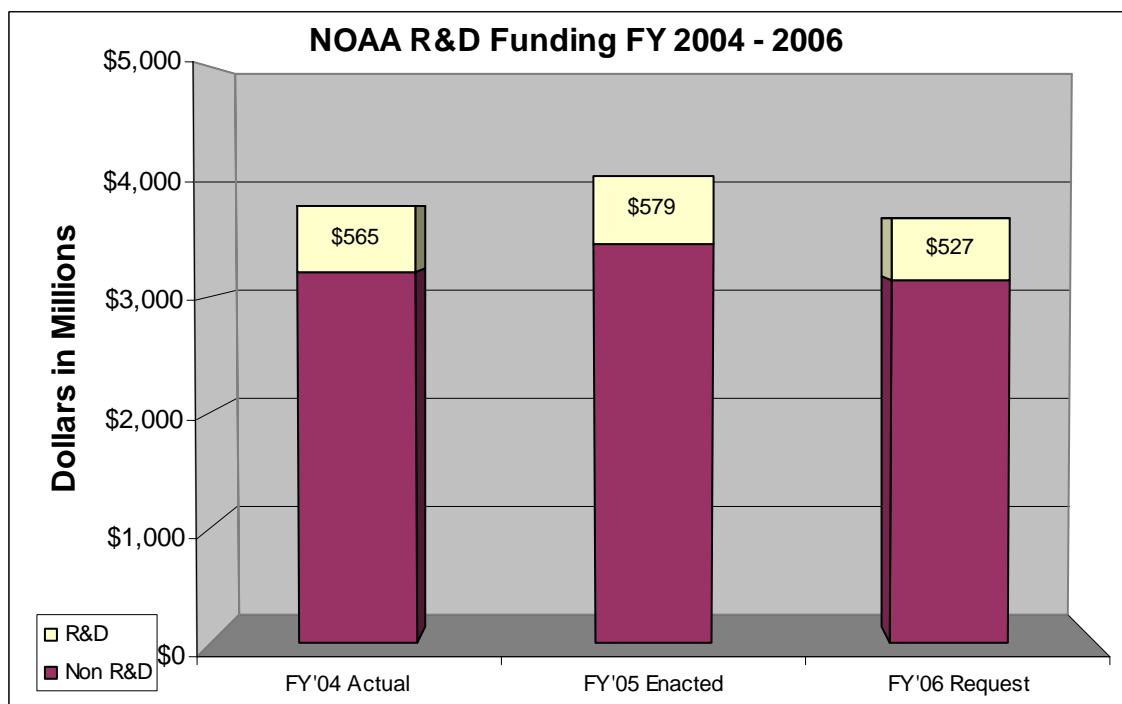
* Totals for outsourcing are approximate and do not include contracts for hydrographic services.

NOAA Research and Development

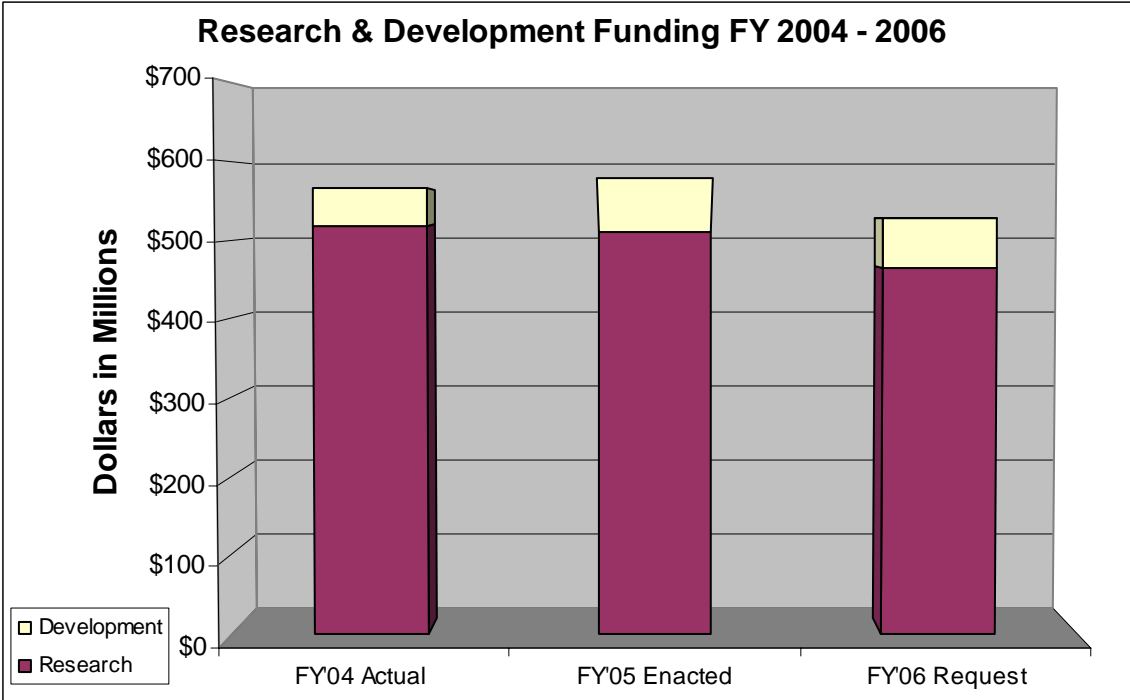
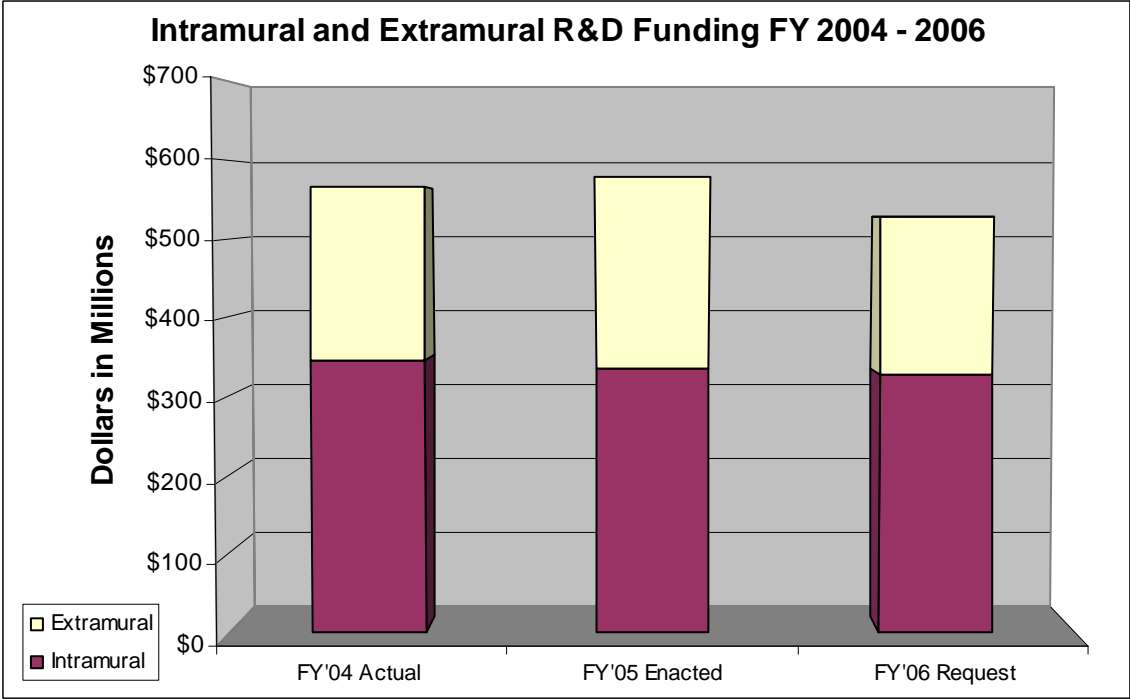
Research and development (R&D) play vital roles in enabling NOAA to accomplish its science-based missions to predict changes in Earth's environment and to conserve and manage coastal and marine resources.

The following charts display the scope and nature of R&D at NOAA. Key elements include the following for FY 2006:

- R&D represents 14.2% of total NOAA funding in FY 2006.
- 62% of NOAA's R&D is intramural and 38% extramural.
- NOAA's R&D budget is 88% research and 12% development.
- NOAA's Office of Oceanic and Atmospheric Research (OAR, also known as "NOAA Research") manages 60% of NOAA's R&D. The remainder is distributed among NOAA's operational units.
- Major R&D efforts are supported by three of NOAA's mission goals: Ecosystems (38%), Climate (30%), and Weather & Water (17%). Only 1% is focused on Commerce & Transportation. The 14% conducted for "Mission Support" primarily provides research vessels for research.

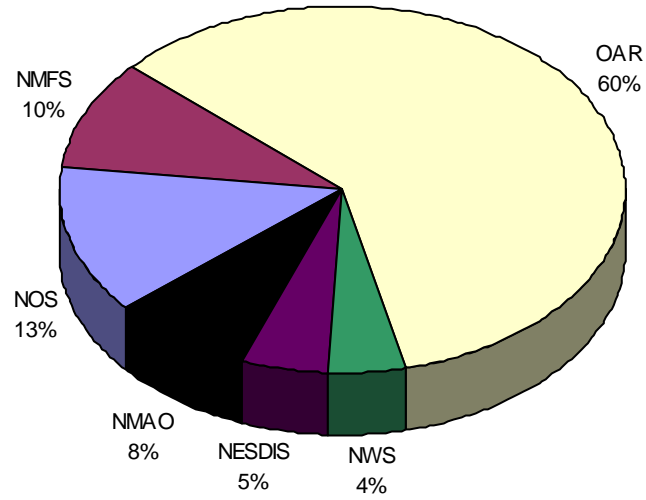


NOAA Research and Development

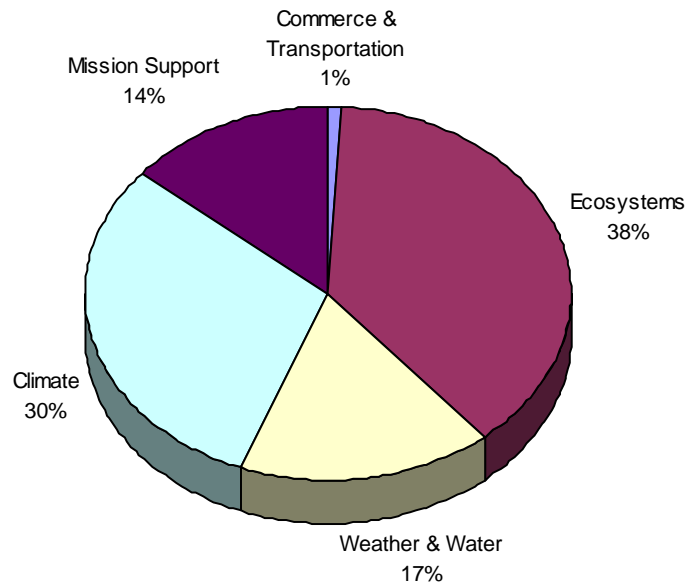


NOAA's Research and Development

FY 2006 R&D Budget by Line Office



FY 2006 R&D Budget by Goal



NATIONAL OCEAN SERVICE

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Navigation Services							
Mapping & Charting							
Mapping & Charting Base	37,154	27,233	28	10,910	38,115	3,982	42,097
Mapping & Charting Base	989	0		1,898	1,898		1,898
Coastal Mapping	0	493		(493)	0		0
Coastal Storms	0	0			0		0
Joint Hydrographic Center	4,298	7,492	0	7	7,499		7,499
Joint Hydrographic Center - Bathymetric Study	3,166	0			0		0
Marine Modeling & Geospatial Technology	0	1,084		(1,084)	0		0
Hydrographic Surveys	0	1,282		(1,282)	0		0
Electronic Navigational Charts	4,304	4,239		61	4,300	1,890	6,190
Nautical Charting	0	6,406		(6,406)	0		0
Navigational Services	0	1,858		(1,858)	0		0
Shoreline Mapping	3,676	2,413		35	2,448		2,448
Chesapeake Bay	989	986	986		0		0
Aerial	989	986	986		0		0
Payment to OMAO	2,764	2,753	2,753		0		0
Address Survey Backlog/Contracts	23,413	18,727		2,273	21,000	10,487	31,487
EEZ Outer Continental Shelf Ocean Bottom Claims	2,203	2,168	2,168		0		0
Gulf of Alaska	2,473	2,463	2,463		0		0
North Pacific	989	986	986		0		0
North Pacific Maritime Boundary Line	989	986	986		0		0
MS/LA Digital Coast	495	789	789		0		0
Vessel Time Charter	(50)	1,971		(1,971)	0		0
Subtotal, Mapping and Charting	88,841	85,315	12,145	2,090	75,260	16,359	91,619
Geodesy							
Geodesy Base	21,329	20,004	680	895	20,219		20,219
National Spatial Reference System	0	1,971			1,971		1,971
Height Modernization Regional Expansion - NGS Implementation	0	247	14		233		233
Height Modernization Regional Expansion - NC	983	986	53		933		933
Height Modernization Regional Expansion -CA	990	493		7	500	433	933
Height Modernization Regional Expansion -TX		739	739		0		0
Height Modernization Regional Expansion - SC	492	0			0	467	467
Height Modernization Study - MS	495	591	591		0		0
Geodetic Survey- KY		493	493		0		0
Geodetic Survey- LA	492	490	490		0		0
Geodetic Survey - WI	2,957	2,957	2,957		0		0
Geodetic Survey - WA	495	493	493		0		0
Geodetic Survey - AL	1,968	1,971	1,971		0		0
Subtotal, Geodesy	30,201	31,435	8,481	902	23,856	900	24,756
Tide & Current Data							
Tide & Current Data Base	20,507	18,401	2,887	5,866	21,380	1,500	22,880
Tide & Current Data Base	248	0		250	250		250
National Water Level Observation Network	0	2,463		(2,463)			0
PORTS	0	2,938		(2,938)			0
Great Lakes NWLON	1,966	1,971	1,971				0
Alaska Current & Tide Data	1,484	1,479	1,479				0
Upper Cook Inlet Tidal Research	492	0					0
Subtotal, Tide & Current Data	24,697	27,252	6,337	715	21,630	1,500	23,130
Total, Navigation Services	143,739	144,002	26,963	3,707	120,746	18,759	139,505
Ocean Resources Conservation and Assessment							
Ocean Assessment Program (OAP)							
Ocean Assessment Program Base	52,595	22,003	8,290	(13,713)	0		0
Ocean Assessment Program Base	5,000	0			0		0
Coastal Monitoring and Prediction	1,237	0			0		0
Coastal Observation Technology System	2,177	2,146	2,146		0		0
Coastal Ocean Research & Monitoring Program	2,473	2,438	2,438		0		0
NOAA ICOOS		7,392	7,392		0		0
NOAA/UNH Joint Ocean Observing Technology Center		3,942	3,942		0		0
Gulf of Alaska Ecosystem Monitoring	743	1,971	1,971		0		0
Gulf of Maine Observing System	1,979	1,873	1,873		0		0
Long Island Sound Observing System	0	986	986		0		0
Central Gulf of Mexico Observing System (USM)		1,971	1,971		0		0
Southeastern Coastal Ocean Observing System	1,979	0			0		0
So Cal Coastal Ocean Observing System (Scripps)	1,979	1,479	1,479		0		0
Center for Integrated Marine Technologies	2,473	0			0		0
Alliance for Coastal Technologies	2,473	2,463	2,463		0		0
Center for Coastal Ocean Observation and Analysis	2,473	2,463	2,463		0		0
Carolina Coastal Ocean Observing and Prediction System	2,473	2,463	2,463		0		0
Wallops Ocean Observation Project	1,979	1,971	1,971		0		0
Coastal Ocean Monitoring Network for West Florida		739	739		0		0
Coastal Storms	2,721	2,463		37	2,500	403	2,903
Cook Inlet Coastal Monitoring and Habitat		986	986		0		0
Beaufort NC	(65)	0			0		0
Pfiesteria Research and HAB Rapid Response	(213)	0			0		0

NATIONAL OCEAN SERVICE

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Coastal Services Center	(1,772)	22,672	4,502	(3,586)	14,584		14,584
Coastal Services Center				5,000	5,000		5,000
Pacific Coastal Services Center	0	2,218	1,318	(900)	0		0
B-WET Hawaii	495	0			0		0
Seacoast Science Center		986	986		0		0
EE Jusi Environmental Institute		739	739		0		0
Coastal Change Analysis	495	493	493		0		0
Harmful Algal Blooms	(171)	0			0		0
Lake Pontchartrain	1,966	1,479	1,479		0		0
CREST	366	444	444		0		0
CI-CORE	2,473	2,463	2,463		0		0
Aquatic Research Consortium MS	2,473	2,463	2,463		0		0
Coop Institute for Coastal and Estuarine Enviro Tech (CICEET)	6,732	6,702			6,710		6,710
Hawaii Coral Reef Initiative	1,237	1,479	1,479		0		0
Nature Conservancy of HI Marine Program	248	0			0		0
Nat'l Coral Reef Initiative - Florida	989	986	986		0		0
Coral Reef - Puerto Rico	495	493	493		0		0
Coral Reef Programs	26,321	24,643	181		24,462	1,500	25,962
National Fish and Wildlife Foundation - NFWF	1,474	689	689		0		0
JASON Education and Outreach	2,452	0			0		0
Ocean Health Initiative		17,742	17,742		0		0
Monterey Bay Watershed	495	493	493		0		0
South Florida Ecosystem	861	0			0		0
Subtotal, Ocean Assessment Program (OAP)	132,105	146,933	80,523	(13,154)	53,256	1,903	55,159
Response and Restoration							
Response and Restoration Base	10,665	10,449		(2,212)	8,237	800	9,037
Response and Restoration Base	5,862	0		7,357	7,357		7,357
Estuary Restoration Program	1,086	1,183		17	1,200		1,200
Damage Assessment Program	0	2,250		(2,250)	0		0
Oil Pollution Act of 1990	(17)	0			0		0
Coastal Protection and Restoration Project	(17)	395		(395)	0		0
Mitigating Coastal Development Impacts/MS State Univ.		986	986		0		0
Marine Wildlife Noise Impacts / Univ of RI		98	98		0		0
Spill Response and Restoration Program	(20)	0			0		0
Marine Debris		4,928	4,928		0		0
Marine Debris Removal - Alaska	495	1,183	1,183		0		0
Marine Debris Removal - SC	173	197	197		0		0
Edisto Beach Marsh Restoration	99	0			0		0
Hazardous Materials Response Program		1,595		(1,595)	0		0
Aquatic Resources Environmental Initiative	4,916	4,928	4,928		0		0
Vieques		986	986		0		0
Center for Marine Spill Response Project	1,979	1,971	1,971		0		0
Pribilof Islands Cleanup and Economic Development	0	6,899		101	7,000	300	7,300
Subtotal, Response and Restoration	25,221	38,048	15,277	1,023	23,794	1,100	24,894
Oceanic and Coastal Research							
Oceanic and Coastal Research	19,549	0			0		0
Prince William Sound Science Center	495	0			0		0
Subtotal, Ocean and Coastal Research	20,044	0	0	0	0	0	0
National Centers for Coastal Ocean Science (NCCOS)							
National Centers for Coastal Ocean Science (NCCOS)				28,693	28,693	2,600	31,293
Extramural Research				16,660	16,660		16,660
Center for Coastal Environmental Health & Biomolecular Rsch	0	14,786	7,442	(7,344)	0		0
Extramural Research	0	3,942	3,942		0		0
LUCES & high salinity estuaries (Baruch)	0	986	986		0		0
Oxford, MD	0	4,436	3,712	(724)	0		0
Extramural Research	0	1,971	1,971		0		0
Ctr for Coastal Fisheries Habitat Research	0	5,667	2,224	(3,443)	0		0
Extramural Research	0	1,971	1,971		0		0
Center for Coastal Monitoring & Assessment	0	5,914		(5,914)	0		0
Extramural Research	0	1,971	1,971		0		0
Center for Sponsored Coastal Ocean Research	0	3,647	338	(3,309)	0		0
Coastal Ocean Research Grants (HAB/Pfisteria/GLOBEC)	0	5,421		(5,421)	0		0
NCCOS Headquarters	0	4,928		(4,928)	0		0
Marine Env Health Research Lab - MEHRL	0	3,942	2,442	(1,500)	0		0
Subtotal, NCCOS	0	59,582	26,999	12,770	45,353	2,600	47,953
Coastal Ocean Science							
Coastal Ocean Program Base	14,840	0			0		0
ECOHAB	(36)	0			0		0
Woods Hole HAB	2,473	0			0		0
Long-term Estuary Assessment Consortium	0	0			0		0
Long Island Sound Observing System	1,781	0			0		0
LUCES & High Salinity Estuaries (Baruch)	1,979	0			0		0
Subtotal, Coastal Ocean Science	21,037	0	0	0	0	0	0

NATIONAL OCEAN SERVICE

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Total, Ocean Resources Conserv. & Assess.	198,407	244,563	122,799	639	122,403	5,603	128,006
Ocean and Coastal Management							
Coastal Management							
CZM Grants	67,399	66,039	3,037	961	63,963		63,963
CZM Program Administration	7,123	6,604		297	6,901	427	7,328
National Estuarine Research Reserve System	15,911	16,165		235	16,400	575	16,975
Non-point Pollution Implementation Grants	9,494	2,957	2,957		0		0
Marine Protected Areas	4,485	2,957	198	43	2,802		2,802
Subtotal, Coastal Management	104,412	94,722	6,192	1,536	90,066	1,002	91,068
Ocean Management							
Marine Sanctuary Program							
Marine Sanctuary Program Base	53,604	50,319	16,076	1,408	35,651		35,651
Marine Sanctuary Foundation / Ocean Activity Fund		4,928	4,928		0		0
Northeast Hawaiian Islands Rsrch / HI Institute of Marine Biology		1,479	1,479		0		0
Northwest Straits Citizens Advisory Commission	743	1,232	1,232		0		0
Subtotal, Ocean Management	54,347	57,958	23,715	1,408	35,651	0	35,651
Total, Ocean and Coastal Management	158,759	152,680	29,907	2,944	125,717	1,002	126,719
Total, National Ocean Service - ORF	500,905	541,245	179,669	7,290	368,866	25,364	394,230
Other National Ocean Service Accounts							
Total, National Ocean Service - PAC	103,028	127,050	115,223	173	12,000	2,500	14,500
Total, National Ocean Service - Other	1,334	1,000	0	5,000	6,000	0	6,000
GRAND TOTAL NATIONAL OCEAN SERVICE	605,267	669,295	294,892	12,463	386,866	27,864	414,730

NATIONAL MARINE FISHERIES SERVICE

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Protected Species Research and Management							
Protected Species Research and Management Programs Base	27,791	26,266	1,040	3,427	28,653	2,272	30,925
Marine Mammals	53,696	81,504	43,481		38,023		38,023
Marine Turtles	12,070	14,943	5,243		9,700		9,700
Other Protected Species (Marine Fish, Plants, and Invertebrates)	2,466	2,464		280	2,744	5,409	8,153
Atlantic Salmon	4,973	5,183		147	5,330	551	5,881
Pacific Salmon (for Salmon Management Activities, see Fisheries Re	44,122	45,170		1,871	47,041	19,550	66,591
Subtotal, Protected Species Research and Management	145,118	175,530	49,764	5,725	131,491	27,782	159,273
Fisheries Research and Management							
Fisheries Research and Management Programs	112,582	123,209	4,426	8,013	126,796	1,035	127,831
Expand Annual Stock Assessments - Improve Data Collection	19,231	20,501		299	20,800	4,597	25,397
Economics & Social Sciences Research	3,894	4,041		59	4,100	5,518	9,618
Salmon Management Activities	24,904	27,747	2,336		25,411		25,411
Regional Councils and Fisheries Commissions	22,496	24,641			24,641	1,305	25,946
Fisheries Statistics	13,361	12,587		184	12,771		12,771
Fish Information Networks	19,783	21,970	571		21,399		21,399
Survey and Monitoring Projects	21,508	23,877	587		23,290		23,290
Fisheries Oceanography	0	0			0	1,000	1,000
American Fisheries Act	5,820	6,037	412		5,625		5,625
Interjurisdictional Fisheries Grants	2,465	2,464		36	2,500	90	2,590
National Standard 8	892	984		14	998		998
Reduce Fishing Impacts on Essential Fish Habitat (EFH)	478	493		7	500		500
Reducing Bycatch	4,776	3,745	945		2,800		2,800
Anadromous Grants	1,999	1,971		29	2,000	100	2,100
Product Quality and Safety	8,113	7,392	668		6,724		6,724
Other fisheries-related projects:	23,141	16,214	16,214		0		0
Subtotal, Fisheries Research and Management	285,443	297,873	26,159	8,641	280,355	13,645	294,000
Enforcement & Observers/Training							
Enforcement	47,307	45,824		1,920	47,744	6,427	54,171
Observers/Training	23,880	24,523			24,523	1,469	25,992
Subtotal, Enforcement & Observers/Training	71,187	70,347	0	1,920	72,267	7,896	80,163
Habitat Conservation & Restoration							
Sustainable Habitat Management	22,165	19,910		927	20,837	(2,039)	18,798
Fisheries Habitat Restoration	19,056	33,338	18,156	116	15,298		15,298
Subtotal, Habitat Conservation & Restoration	41,221	53,248	18,156	1,043	36,135	(2,039)	34,096
Other Activities Supporting Fisheries							
Antarctic Research	1,471	1,446		22	1,468		1,468
Center for Marine Education and Research (MS) (moved to MM & S	2,865	2,957	2,957		0		0
Chesapeake Bay Studies	3,286	3,449	1,542		1,907		1,907
Climate Regimes & Ecosystem Productivity	1,433	1,478		22	1,500	500	2,000
Computer Hardware and Software - FY 2004 Omnibus Funded in PA	(193)	3,335		48	3,383		3,383
Cooperative Research	18,964	19,173	9,679		9,494		9,494
Information Analyses & Dissemination	20,422	17,686		255	17,941	387	18,328
Magnuson-Stevens (MSA) Implementation off Alaska	6,859	7,018		102	7,120		7,120
Marine Resources Monitoring, Assessment & Prediction Prgm (Mar	1,194	1,232	382	0	850		850
National Environmental Policy Act (NEPA)	2,792	2,957			3,000	4,997	7,997
NMFS Facilities Maintenance	[4,297]	0		4,000	4,000		4,000
Southeast Area Monitoring & Assessment Program (SEAMAP)	1,672	1,366		19	1,385		1,385
Other Projects	17,607	17,420	17,420		0		0
Subtotal, Other Activities Supporting Fisheries	78,372	79,517	31,980	4,511	52,048	5,884	57,932
Total, National Marine Fisheries Service - ORF	621,341	676,515	126,059	21,840	572,296	53,168	625,464
Other National Marine Fisheries Service Accounts							
Total, National Marine Fisheries Service - PAC	23,200	31,048	29,077	29	2,000	0	2,000
Total, National Marine Fisheries Service - Other	113,552	116,082	450	(15,273)	100,359	60	100,419
GRAND TOTAL NATIONAL MARINE FISHERIES SERVICE	758,093	823,645	155,586	6,596	674,655	53,228	727,883

NOAA RESEARCH
(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Climate Research							
Laboratories & Joint Institutes	1,700	1,774		71	1,845		1,845
Laboratories & Joint Institutes	1,383	1,413		56	1,469		1,469
Laboratories & Joint Institutes	44,163	42,860		1,767	44,627		44,627
Subtotal, Laboratories & Joint Institutions	47,246	46,047	0	1,894	47,941		47,941
Climate & Global Change Program							
Climate and Global Change	68,175	66,039	9,144	510	57,405		57,405
Accelerating Climate Models - IRIS	1,484	1,478	1,478		0		0
Subtotal, Climate & Global Change Program	69,659	67,517	10,622	510	57,405	0	57,405
Climate Observations & Services							
Climate Research & Observations	20,411	13,707		524	14,231	3,233	17,464
Climate Operations	1,025	0			0	895	895
Climate Data & Information	3,957	0			0	3,313	3,313
Climate Change Research Initiative	22,356	39,427		(2,465)	36,962	10,593	47,555
Subtotal, Climate Observations & Services	47,749	53,134	0	(1,941)	51,193	18,034	69,227
Arctic Research Program							
Arctic Research Program	3,637	4,928	1,995	84	3,017		3,017
Subtotal, Arctic Research Program	3,637	4,928	1,995	84	3,017	0	3,017
Other Partnership Programs							
Central CA Ozone Study	0	247	247		0		0
East Tennessee Ozone Study	297	296	296		0		0
Climate System Research Center		739	739		0		0
Inst. for Study of Earth, Oceans & Space (Air-Map - CCRC)	(7)	0			0		0
International Pacific Research Center (U of HI)	(8)	0			0		0
Intl Council for Local Environmental Initiatives		492	492		0		0
Climate and Environmental Change	2,473	2,438	2,438		0		0
Univ of AL Huntsville Climate Research		986	986		0		0
Abrupt Climate Change Research	495	487	487		0		0
Subtotal, Other Partnership Programs	3,250	5,685	5,685	0	0	0	0
Total, Climate Research	171,541	177,311	18,302	547	159,556	18,034	177,590
Weather & Air Quality Research							
Laboratories & Joint Institutes							
Laboratories & Joint Institutes	38,533	34,278	1,501	2,720	35,497	1,700	37,197
Subtotal, Laboratories & Joint Institutes	38,533	34,278	1,501	2,720	35,497	1,700	37,197
U.S. Weather Research Program							
U.S. Weather Research Program (USWRP) (THORPEX)	5,175	493		(493)	0		0
Targeted Wind Sensing	1,895	1,971	1,971		0		0
Hurricane Research and Model Improvements		699	699		0		0
Subtotal, U.S. Weather Research Program	7,070	3,163	2,670	(493)	0	0	0
Weather & Air Quality Research Programs							
Tornado Severe Storm Research / Phased Array Radar	990	1,971	1,004	35	1,002		1,002
Subtotal, Weather & Air Quality Research Programs	990	1,971	1,004	35	1,002	0	1,002
Other Partnership Programs							
New England Air Quality Study	2,968	1,971	1,971		0		0
NE Center for Atmospheric Science and Policy		1,479	1,479		0		0
Inst. for Study of Earth, Oceans & Space (Air-Map - CCRC)	4,919	4,930	4,930		0		0
Risk Reduction in Water Forecasts (MSU)		1,971	1,971		0		0
Remote Sensing Research (ISU/BCAL)	495	487	487		0		0
STORM (U. of N. Iowa)	487	640	640		0		0
Subtotal, Other Partnership Programs	8,869	11,478	11,478	0	0	0	0
Total, Weather & Air Quality Research	55,462	50,890	16,653	2,262	36,499	1,700	38,199
Ocean, Coastal, and Great Lakes Research							
Laboratories & Joint Institutes							
Laboratories & Joint Institutes	19,678	19,764	737	549	19,576	0	19,576
Laboratories & Joint Institutes	468	476	0	21	497	0	497
Payment to OMAO	99	98	98	0	0		0
Subtotal, Laboratories & Joint Institutes	20,245	20,338	835	570	20,073	0	20,073
National Sea Grant College Program							
National Sea Grant College Program Base	61,948	57,169	719	4,758	61,208		61,208
Fish Extension	0	1,478		(1,478)	0		0
Aquatic Nuisance Species/Zebra Mussel Research	0	986		(986)	0		0
Gulf of Mexico Oyster Initiative	0	986		(986)	0		0
Marine Invasive Species Program	0	247		(247)	0		0
Oyster Disease Research	0	986		(986)	0		0
Subtotal, National Sea Grant College Program	61,948	61,852	719	75	61,208	0	61,208

NOAA RESEARCH
(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
National Undersea Research Program (NURP)							
National Undersea Research Program (NURP)	11,866	12,321	1,884	27	10,464		10,464
National Institute for Undersea Science and Technology	4,948	4,928	4,928		0		0
Subtotal, National Undersea Research Program (NURP)	16,814	17,249	6,812	27	10,464	0	10,464
NMNH East Wing (Oceans)							
NMNH East Wing (Oceans)	15,832	4,928	4,928		0		0
Ocean Exploration	12,920	22,670	56	79	22,693		22,693
Submersible Micro-technology Research	983	969	969		0		0
Subtotal, Ocean Exploration	29,735	28,567	5,953	79	22,693	0	22,693
Other Ecosystems Programs							
Aquatic Invasive Species Program		0			0	2,502	2,502
Marine Aquaculture Program	761	0			0	1,622	1,622
Subtotal, Other Ecosystems Programs	761	0	0	0	0	4,124	4,124
Other Partnership Programs							
Aquatic Ecosystems - Cavanaugh Valley Institute	2,562	4,239	4,239		0		0
Institute for Science Technology and Public Policy	965	887	887		0		0
Atmospheric Dispersion Forecasting / Jackson State Univ.		986	986		0		0
Great Lakes Toxicity	495	488	488		0		0
Gulf of Maine Council	989	739	739		0		0
Lake Champlain Research Consortium	248	345	345		0		0
NISA/Ballast Water Demonstrations	3,431	3,450	3,450		0		0
NISA/Alaska	1,286	1,479	1,479		0		0
New Hampshire Milfoil	581	0			0		0
NOAA Marine Aquaculture Program		0			0		0
Ocean Health Initiative	9,894	0			0		0
Cooperative Institute for New England Mari-culture and Fisheries	2,914	2,957	2,957		0		0
NH Center for the Study of Lakes and Ecosystems		492	492		0		0
Cooperative Sensor Development Lab for Oceans & Climate	495	492	492		0		0
Aquaculture Education Program - Cedar Point MS	(186)	1,774	1,774		0		0
Pacific Tropical Ornamental Fish	479	492	492		0		0
Aquaculture Management Plan - RICRMC	(31)	0			0		0
Tsunami Hazard Mitigation	(11)	0			0		0
Subtotal, Other Partnership Programs	24,111	18,820	18,820	0	0	0	0
Total, Ocean, Coastal, and Great Lakes Research	153,614	146,826	33,139	751	114,438	4,124	118,562
Information Technology, R&D, and Science Education							
High Performance Computing Initiatives	12,700	12,322	0	401	12,723	226	12,949
Educational Partnership Program/Minority Serving Institutions (EPP)	0	16,757	2,350	0	14,407		14,407
Total, Info Tech, R&D, & Science Education	12,700	29,079	2,350	401	27,130	226	27,356
Total, NOAA Research - ORF	393,317	404,106	70,444	3,961	337,623	24,084	361,707
Other NOAA Research Accounts							
Total, NOAA Research - PAC	21,267	9,663	300	137	9,500	984	10,484
Total, NOAA Research - Other	0	0	0	0	0	0	0
GRAND TOTAL NOAA RESEARCH	414,584	413,769	70,744	4,098	347,123	25,068	372,191

NATIONAL WEATHER SERVICE

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Operations and Research							
Local Warnings and Forecasts Base	9,767	9,938		3,581	13,519		13,519
Local Warnings and Forecasts Base	9,025	9,212		352	9,564		9,564
Local Warnings and Forecasts Base	529,838	503,798	2,328	16,077	517,547	4,000	521,547
Tsunami Hazard Mitigation (moved from OAR)	0	4,239	1,948		2,291		2,291
Pacific Ocean Monitoring Buoy Augmentation	593	0			0		0
Tsunami Warning & Environmental Obs for AK (TWEAK)	1,979	1,971	1,971		0		0
Air Quality Forecasting Pilot Program	2,968	2,925		(2,925)	0		0
Air Quality Forecasting	0	1,725		2,993	4,718	782	5,500
Alaska Data Buoys	1,484	1,478		22	1,500	200	1,700
HI Data Bouys		247	247		0		0
Sustain Cooperative Observer Network	1,870	1,774		26	1,800	90	1,890
High Resolution Temperature Forecasting	4,155	0			0		0
Hurricane Mitigation Alliance (SUSF)	3,711	3,203	3,203		0		0
North Dakota Ag Weather Network	267	0			0		0
Red River Basin Institute / Decision Info Network		267	267		0		0
Mt. Washington Observatory	989	0			0		0
Susquehanna River Basin Flood System	0	0			0		0
New England Weather Technology Initiative	495	542	542		0		0
NOAA Profiler Network	4,107	3,155	255		2,900		2,900
NC Flood Plain Mapping Pilot	593	584	584		0		0
Pacific Island Compact	3,512	3,450		50	3,500	50	3,550
Phased Array Radar (PAR) Engineering/Manufacturing	20	0			0		0
Facilities Physical Security	248	0			0		0
Space Environment Center	0	197		3	200	80	280
Space Environment Center	0	6,653		266	6,919		6,919
USWRP - THORPEX	0	4,436		616	5,052	2,405	7,457
Vermont Northeast Weather & Wind Data Integration		247	247		0		0
Payment to OMAO	495	468	468		0		0
Strengthen U.S. Tsunami Warning Network					0	5,970	5,970
Subtotal, Local Warnings and Forecasts	576,116	560,509	12,060	21,061	569,510	13,577	583,087
Advanced Hydrological Prediction Services	5,994	5,717		83	5,800	298	6,098
Aviation Weather	2,473	2,366		34	2,400	1,100	3,500
WFO Maintenance	0	0		7,390	7,390		7,390
Weather Radio Transmitters							
Weather Radio Transmitters Base	2,295	2,287		33	2,320		2,320
NOAA Weather Radio Transmitters - HI		197	197		0		0
Subtotal, Weather Radio Transmitters	2,295	2,484	197	33	2,320	0	2,320
Subtotal, Local Warnings and Forecasts	586,878	571,076	12,257	28,601	587,420	14,975	602,395
Central Forecast Guidance							
Central Forecast Guidance	5,621	5,725		221	5,946		5,946
Central Forecast Guidance	2,768	2,807		109	2,916		2,916
Central Forecast Guidance	36,237	37,581	1,000	1,414	37,995	3,035	41,030
Subtotal, Central Forecast Guidance	44,626	46,113	1,000	1,744	46,857	3,035	49,892
Total, Operations and Research	631,504	617,189	13,257	30,345	634,277	18,010	652,287
Systems Operation & Maintenance (O&M)							
NEXRAD	43,576	38,735		1,696	40,431	2,936	43,367
Subtotal, NEXRAD	43,576	38,735	0	1,696	40,431	2,936	43,367
ASOS	8,162	8,265	120	448	8,593		8,593
Subtotal, ASOS	8,162	8,265	120	448	8,593	0	8,593
AWIPS	37,174	36,695	53	899	37,541		37,541
NWSTG Backup - CIP	3,010	3,042	45	45	3,042		3,042
Total, Systems Operation & Maintenance	91,922	86,737	218	3,088	89,607	2,936	92,543
Total, National Weather Service - ORF	723,426	703,926	13,475	33,433	723,884	20,946	744,830
Other National Weather Service Accounts							
Total, National Weather Service - PAC	101,448	79,055	319	1,151	79,887	14,546	94,433
Total, National Weather Service - Other	0	0	0	0	0	0	0
GRAND TOTAL NATIONAL WEATHER SERVICE	824,874	782,981	13,794	34,584	803,771	35,492	839,263

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Environmental Satellite Observing Systems							
Satellite Command and Control	34,721	36,026	1,000	1,185	36,211	800	37,011
NSOF Operations	0	5,599		1,374	6,973	608	7,581
Satellite Command and Control	34,721	41,625	1,000	2,559	43,184	1,408	44,592
Product Processing and Distribution							
Product Processing and Distribution	4,546	4,472		162	4,634		4,634
Product Processing and Distribution	18,777	22,401	500	693	22,594	400	22,994
Subtotal, Product Processing and Distribution	23,323	26,873	500	855	27,228	400	27,628
Product Development, Readiness & Application							
Product Development, Readiness & Application	15,354	16,601	300	523	16,824	400	17,224
Product Development / Ocean Remote Sensing	3,384	3,942		38	3,980		3,980
Coral Reef Monitoring	0	690		10	700	37	737
Joint Center/Accelerate Use of Satellites	1,475	2,168		29	2,197	1,094	3,291
Research to Ops/NOAA-NASA Partnerships		3,942	3,942		0		0
Global Wind Demo	3,562	3,696	2,714		982		982
Subtotal, Product Development, Readiness & Application	23,775	31,039	6,956	600	24,683	1,531	26,214
Interagency Global Positioning System Executive Board Secretarial (IGEB)		247	247				
Commercial Remote Sensing Licensing & Enforcement	1,126	1,085		35	1,120	124	1,244
Office of Space Commercialization	0	591		9	600		600
Total, Environmental Satellite Observing Systems	82,945	101,460	8,703	4,058	96,815	3,463	100,278
NOAA's Data Centers & Information Services							
Archive, Access & Assessment							
Archive, Access & Assessment	12,600	14,528		1,009	15,537	945	16,482
Archive, Access & Assessment	1,766	2,244		144	2,388		2,388
Archive, Access & Assessment	8,328	7,656		484	8,140		8,140
Archive, Access & Assessment	0	2,921		298	3,219		3,219
Archive, Access & Assessment	2,524	3,205		206	3,411		3,411
Archive, Access & Assessment /Climate Database Modernization	22,135	0			0		0
KY	0	7,811	5,766		2,045		2,045
MD	0	5,421	3,925		1,496		1,496
Quality Assurance/Quality Control (NC)	0	1,479	1,071		408		408
WV	0	7,811	5,656		2,155		2,155
GOES Data Archive Project	2,473	2,437	2,437		0		0
Payment to OMAO	297	328	328		0		0
Subtotal, Archive, Access & Assessment	50,123	55,841	19,183	2,141	38,799	945	39,744
Coastal Data Development	4,456	4,510		66	4,576		4,576
Regional Climate Centers	2,072	2,464	2,464		0		0
International Pacific Research Ctr (U of H)	989	1,971	1,971		0		0
Pacific Ocean and Environment Info Center		986	986		0		0
Environmental Data Systems Modernization	11,085	8,828		556	9,384		9,384
Total, NOAA's Data Centers & Information Services	68,725	74,600	24,604	2,763	52,759	945	53,704
Total, Nat'l Environ Satellite, Data & Info Service - ORF	151,670	176,060	33,307	6,821	149,574	4,408	153,982
Other Nat'l Environ Satellite, Data & Info Service Accounts							
Total, Nat'l Environ Satellite, Data & Info Service - PAC	675,386	731,388	0	10,642	742,030	67,874	809,904
Total, Nat'l Environ Satellite, Data & Info Service - Other	0	0	0	0	0	0	0
GRAND TOTAL NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE	827,056	907,448	33,307	17,463	891,604	72,282	963,886

PROGRAM, PLANNING AND INTEGRATION

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Program Planning and Integration	1,979	2,464	464	4	2,004		2,004
Total, Program, Planning and Integration	1,979	2,464	464	4	2,004	0	2,004

PROGRAM SUPPORT
(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Corporate Services							
Under Secretary and Associate Offices							
Under Secretary and Associate Offices Base	24,637	24,641	50	3,038	27,629	1,600	29,229
Subtotal, Under Secretary and Assoc. Ofc	24,637	24,641	50	3,038	27,629	1,600	29,229
Policy Formulation and Direction							
Policy Formulation and Direction Base/	129,875	40,441		1,632	42,073	(411)	41,662
CBS (Formally CAMS)	9,461	9,856	513	144	9,487	5,229	14,716
Office of the Chief Admin. Officer Facilities Staff (CAO)	0	0			0	1,500	1,500
Office of Chief Financial Officer (CFO)	0	0			0	1,500	1,500
Office of Workforce Management	0	0		123	123		123
Educ. Partnership Prog/Minority Serving Inst. (EPPMSI mov	14,561	0					0
Payment to the DOC Working Capital Fund	0	38,934		1,759	40,693		40,693
Payment to the Business Management Fund	0	55,197		(390)	54,807	9,294	64,101
Subtotal, Policy Formulation and Direction	153,897	144,428	513	3,268	147,183	17,112	164,295
Office of Chief Information Officer							
Office of Chief Information Officer (CIO)	0	0			0	1,830	1,830
IT Security	0	0			0	4,050	4,050
Subtotal, Office of Chief Information Officer	0	0	0	0	0	5,880	5,880
Total, Corporate Services	178,534	169,069	563	6,306	174,812	24,592	199,404
NOAA Education Program							
NOAA Education Program / Education Initiative	1,484	10,392	10,392		0		0
Ocean Science Bowl		986	986		0		0
JASON Education and Outreach		2,463	2,463		0		0
Bay Watersheds Education & Training Program		2,463	2,463		0		0
BWET Hawaii		1,479	1,479		0		0
Narragansett Bay Marine Education (Save the Bay)		492	492		0		0
Total, NOAA Education Program	1,484	18,275	18,275	0	0	0	0
Facilities							
NOAA Facilities Mgmt & Constuction and Safety	(487)	7,392		2,101	9,493	3,938	13,431
NOAA Wide Facility Maintenance (consolidated)		17,743	6,610	(11,133)	0		0
Boulder Facilities Operations	0	3,464		50	3,514		3,514
Boulder Facilities Operations	0	630		9	639		639
Boulder Facilities Operations	(128)	406		5	411		411
Western Regional Center Operations & Maintenance	0	689		(689)	0		0
Subtotal, NOAA Fac Mgmt, Const& Maint	(615)	30,324	6,610	(9,657)	14,057	3,938	17,995
Environmental Compliance & Safety	1,885	2,957		43	3,000	1,087	4,087
Project Planning and Execution							
Pribolof Islands Cleanup (moved to NOS in FY05)	7,892				0		0
Subtotal, Project Planning and Execution	7,892	0	0	0	0	0	0
Total, Facilities	9,162	33,281	6,610	(9,614)	17,057	5,025	22,082
Marine Operations & Maintenance							
Marine Services							
Salaries & Expenses	82,157	73,924		12,841	86,765		86,765
UNOLS		1,478		(1,478)	0		0
HI'IALAKAI		4,533		(4,533)	0		0
OSCAR DYSON & FAIRWEATHER		10,054	7,570	(2,484)	0		0
NANCY FOSTER		542		(542)	0		0
OE and NOAA Corps Pay Differential		1,971	1,971		0		0
CAPABLE (transfer from DOD)		18,000	18,000		0		0
Subtotal, Marine Services	82,157	110,502	27,541	3,804	86,765	0	86,765
Fleet Planning and Maintenance							
New Vessels (O Dyson, N Foster, Fairweather, Hi'ialakai)		1,971	1,063	(908)	0		0
Fleet Planning and Maintenance	12,239	11,828		1,235	13,063		13,063
Subtotal, Fleet Planning and Maintenance	12,239	13,799	1,063	327	13,063	0	13,063
Total, Marine Operations and Maintenance	94,396	124,301	28,604	4,131	99,828	0	99,828
Aviation Operations							
Aircraft Services	17,949	18,334	267	558	18,625		18,625
Total, Aviation Operations	17,949	18,334	267	558	18,625	0	18,625
Future Healthcare Benefits for Current Officers	1,182	1,914		98	2,012	0	2,012
Total, Office of Marine & Aviation Operations	113,527	144,549	28,871	4,787	120,465	0	120,465

PROGRAM SUPPORT

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Total, Program Support - ORF	302,707	365,174	54,319	1,479	312,334	29,617	341,951
Other Program Support Accounts							
Total, Program Support - PAC	36,766	63,918	27,211	26	36,733	(1,003)	35,730
Total, Program Support - Other	17,151	17,574	0	930	18,504	0	18,504
GRAND TOTAL PROGRAM SUPPORT	356,624	446,666	81,530	2,435	367,571	28,614	396,185

ORF SUMMARY

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Operations, Research and Facilities	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Line Office Summary:							
National Ocean Service	500,905	541,245	179,669	7,290	368,866	25,364	394,230
National Marine Fisheries Service	621,341	676,515	126,059	21,840	572,296	53,168	625,464
NOAA Research	393,317	404,106	70,444	3,961	337,623	24,084	361,707
National Weather Service	723,426	703,926	13,475	33,433	723,884	20,946	744,830
National Environ. Sat. Data & Info Service	151,670	176,060	33,307	6,821	149,574	4,408	153,982
Planning, Program and Integration	1,979	2,464	464	4	2,004	0	2,004
Program Support	302,707	365,174	54,319	1,479	312,334	29,617	341,951
TOTAL ORF DIRECT OBLIGATIONS	2,695,345	2,869,490	477,737	74,828	2,466,581	157,587	2,624,168
Financing:							
De-Obligations					(16,000)		(16,000)
Treasury Returned Deobligations	(1,694)						
Transfer from Pacific Coastal Salmor	4,453						
Subtotal ORF Adjustments	2,759	0	0	0	(16,000)	0	(16,000)
TOTAL ORF BUDGET AUTHORITY	2,698,104	2,869,490	477,737	74,828	2,450,581	157,587	2,608,168
Transfers:							
Transfers to FFPA		246					
Transfer from PAC		(1,043)					
Transfer from DOD		(18,000)					
Promote & Develop - Tranfer from PAC	(62,000)	(65,000)		(12,000)	(77,000)		(77,000)
CZMF - Transfer from PAC	204	(2,960)		(40)	(3,000)		(3,000)
Transfer from Salmon	(4,453)	(89)					
Transfer to Marine Mammal Commissior	1,194						
Unobligated Balance Rescissior	22,855						
Subtotal ORF Transfers	(42,200)	(86,846)	0	(12,040)	(80,000)	0	(80,000)
TOTAL ORF APPROPRIATION	2,655,904	2,782,644	477,737	62,788	2,370,581	157,587	2,528,168

PROCUREMENT, ACQUISITION AND CONSTRUCTION

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Procurement, Acquisition and Construction	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
NOS							
Construction/Acquisition							
Coastal and Estuarine Land Conservation Program							
Armand Bayou and Genoa-Red Bluff, TX		591	591		0		0
Bainbridge Island, WA		493	493		0		0
Bayou Liberty Watershed Wetlands, LA		887	887		0		0
Buffalo Bayou, TX		1,183	1,183		0		0
Coastal and Estuarine Land Conservation Program	50,558	0			0		0
Dos Pueblos, CA		2,957	2,957		0		0
East Sandusky Bay Preserve, Ohio		1,479	1,479		0		0
Flats East Riverfront Park, Ohio		1,479	1,479		0		0
Hawaii CELP projects		2,957	2,957		0		0
Louisiana Dept of Wildlife and Fisherie		1,971	1,971		0		0
Manahawkin Marsh, NJ		789	789		0		0
Maumee River Basin, Ohio		1,479	1,479		0		0
Maury Island		1,479	1,479		0		0
MD Chesapeake Bay (incl Wapiti Farms & Holly Grove		5,668	5,668		0		0
Mentor Marsh Lake County, Ohio		986	986		0		0
Middletown, RI		739	739		0		0
Mount Agamenticus to the Sea, ME		986	986		0		0
North Hempstead, NY		986	986		0		0
Nulands Neck, MA		296	296		0		0
Orange Beach (Robinson Island), AL		986	986		0		0
Port Akansas Nature Preserve Wetlands Protection Project, TX		2,957	2,957		0		0
Potomac Watershed, VA		2,957	2,957		0		0
Seacoast, NH		2,464	2,464		0		0
Southhold, NY		1,479	1,479		0		0
Southwest Alaska Conservation		986	986		0		0
Tomer Canyon		492	492		0		0
Wolf River Corridor		1,971	1,971		0		0
Subtotal, Coastal and Estuarine Land Conservation Program	50,558	41,697	41,697	0	0	0	0
NERRS Acquisition/Construction:							
National Estuarine Rsrch Reserve Construction & Land Acq (NERRS Elkhorn Slough, CA	36,263	6,899		101	7,000	250	7,250
		1,971	1,971		0		0
Subtotal, NERRS Acquisition/Construction	36,263	8,870	1,971	101	7,000	250	7,250
Section 2 (FWCA) Coastal/Estuarine Land Acquisition							
Bonneau Ferry, SC		19,711	19,711		0		0
Great Bay Partnership, NH		7,885	7,885		0		0
Subtotal, NERRS Acquisition/Construction	0	27,596	27,596	0	0	0	0
Subtotal, NERRS Acquisition/Construction	36,263	36,466	29,567	101	7,000	250	7,250
Marine Sanctuaries Construction/Acquisition							
Marine Sanctuaries Construction Base	4,324	4,928		72	5,000	2,250	7,250
Channel Islands National Marine Sanctuary		3,942	3,942		0		0
Florida Keys National Marine Sanctuary	(2,508)	0			0		0
Humpback Whale National Marine Sanctuary	1,659	0			0		0
Thunder Bay NMS Exhibit		986	986		0		0
Monterey Bay National Marine Sanctuary	(323)	0			0		0
Subtotal, Marine Sanctuary Construction/Acquisition	3,152	9,856	4,928	72	5,000	2,250	7,250
Other NOS Construction/Acquisition							
Kachemack Bay Service Facility	(1)	0			0		0
Bigelow Lab for Ocean Science (ME)		1,478	1,478		0		0
Fort Johnson Joint Lab (SCDNR) Modernization	1,979	0			0		0
NOAA ICOOS Observing Systems		8,871	8,871		0		0
Convert NOAA Weather Bouys with NDBC		7,886	7,886		0		0
Gulf Coast Lab at Cedar Point (USM)		1,478	1,478		0		0
Down East Inst. For Marine Research (ME)		0			0		0
Pier Romeo Hardening (Charleston)		2,366	2,366		0		0
Kasitsna Bay Laboratory	3,958	0			0		0
Marine Environmental Health Research Laboratory Enhancement & I	5,937	6,899	6,899		0		0
National Aquarium Partnership		986	986		0		0
Conservation Institute	1,183	1,183	1,183		0		0
Univ of South Carolina Thomas Cooper Facility		3,942	3,942		0		0
Coastal Service Center	1,624	3,942	3,942		0		0
Rescission	(1,625)	0			0		0
Subtotal, Other NOS Construction/Acquisition	13,055	39,031	39,031	0	0	0	0
Total NOS - PAC	103,028	127,050	115,223	173	12,000	2,500	14,500
NMFS							
Systems Acquisition/Construction							
Systems Acq. Computer Hardware & Software	3,455	3,450	3,450		0		0
Alaska Facilities Fisheries Center Juneau	0	0			0		0
Aquatic Resources	4,756	4,928	4,928		0		0
Southeastern Regional Office	1,584	0			0		0
Botanical Gardens	0	0			0		0
Pacific Regional Center (Honolulu Fisheries Lab) (may move to PS	11,873	14,785	14,785		0		0
Pascagoula Laboratory	1,979	0			0		0
Barrow Arctic Research Center		5,914	5,914		0		0
Phase III - Galveston Laboratory Renovation - NMFS	1,979	1,971		29	2,000		2,000
Subtotal, NMFS Construction	25,626	31,048	29,077	29	2,000	0	2,000
Fleet Replacement							
Fisheries Research Vessel Replacemen	(2,426)	0			0		0

PROCUREMENT, ACQUISITION AND CONSTRUCTION

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN Procurement, Acquisition and Construction	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Subtotal, NMFS Fleet Replacement	(2,426)	0	0	0	0	0	0
Total, NMFS - PAC	23,200	31,048	29,077	29	2,000	0	2,000
OAR							
Systems Acquisition							
Comprehensive Large Array Data Stewardship System	3,049	0			0		0
Research Supercomputing/ CCRI	9,808	9,363		137	9,500	984	10,484
Air Force Hurricane Radiometer Processing	0	300	300		0		0
Subtotal, OAR Systems Acquisition	12,857	9,663	300	137	9,500	984	10,484
Construction							
Barrow Artic Research Ctr (Phase I)	8,410	0			0		0
Subtotal, OAR Construction	8,410	0	0	0	0	0	0
Total, OAR - PAC	21,267	9,663	300	137	9,500	984	10,484
NWS							
Systems Acquisition							
ASOS	5,071	4,608		67	4,675		4,675
AWIPS	13,936	12,708		186	12,894		12,894
NEXRAD	10,918	10,665		155	10,820	(2,360)	8,460
NWSTG Legacy Replacement	2,770	2,476		36	2,512	(2,012)	500
Radiosonde Network Replacement	6,137	6,285		91	6,376	(1,989)	4,387
Weather and Climate Supercomputing	6,392	6,681	319	98	6,460		6,460
Weather and Climate Supercomputing	12,646	12,641		184	12,825		12,825
Weather and Climate Supercomputing Back-up	7,073	7,045		103	7,148		7,148
Cooperative Observer Network Modernization	0	864		13	877	3,400	4,277
NWS Coastal Global Ocean Observing System	0	0				1,497	1,497
Complete and Sustain NOAA Weather Radio	0	0				5,650	5,650
All Hazard National Warning Network: NOAA Weather Radio	5,442	0					0
Strengthen U.S. Tsunami Warning Network						3,530	3,530
Subtotal, NWS Systems Acquisition	70,385	63,973	319	933	64,587	7,716	72,303
Construction							
WFO Construction	13,459	12,814		186	13,000	630	13,630
WFO Maintenance	7,313	0			0		0
NOAA Center for Weather & Climate Prediction	10,291	2,268		32	2,300	6,200	8,500
Subtotal, NWS Construction	31,063	15,082	0	218	15,300	6,830	22,130
Total, NWS - PAC	101,448	79,055	319	1,151	79,887	14,546	94,433
NESDIS							
Systems Acquisition							
Geostationary Systems	274,632	301,153		4,384	305,537	52,605	358,142
Subtotal, NESDIS - GOES	274,632	301,153	0	4,384	305,537	52,605	358,142
Polar Orbiting Systems - POES	113,179	104,230		1,516	105,746	(3,073)	102,673
LandSat		0				11,000	11,000
Polar Orbiting Systems - NPOESS	273,789	300,528		4,373	304,901	16,097	320,998
EOS & Advanced Polar Data Processing, Distribution & A Archiving	1,237	1,479		21	1,500	(1,000)	500
EOS & Advanced Polar Data Processing, Distribution & A Archiving	1,237	1,479		21	1,500	(1,000)	500
Subtotal, NESDIS - EOS	2,474	2,958	0	42	3,000	(2,000)	1,000
CIP - single point of failure	2,769	2,760		40	2,800		2,800
Subtotal, NESDIS - CIP	2,769	2,760	0	40	2,800	0	2,800
Comprehensive Large Array Data Stewardship Sys (CLASS)	0	6,448		93	6,541		6,541
Coastal Remote Sensing	488	0			0		0
NPOESS Preparatory Data Exploitation	0	0			0	4,500	4,500
Subtotal, NESDIS Systems Acquisition	667,331	718,077	0	10,448	728,525	79,129	807,654
Construction							
Satellite CDA Facility	0	2,218		32	2,250		2,250
Suitland Facility / NSOF	8,055	11,093		162	11,255	(11,255)	0
Subtotal, NESDIS Construction	8,055	13,311	0	194	13,505	(11,255)	2,250
Total, NESDIS - PAC	675,386	731,388	0	10,642	742,030	67,874	809,904
Program Support / Corporate Services							
HCHB Infrastructure Repairs	(419)	0			0		0
CAMS	(27)	0			0		0
AMNH	989	986	986		0		0
NOAA Maintenance - Backlog	4,948	0			0		0
NOAA Maintenance - Cyclical	2,523	0			0		0
Base / Admin Holdings / Ship Creek	(111)	0			0		0
Subtotal, Corporate Services	7,903	986	986	0	0	0	0
Program Support / Construction							
Construction (Sec. 212)	6,065	0			0		0
Subtotal, Construction	6,065	0	0	0	0	0	0

PROCUREMENT, ACQUISITION AND CONSTRUCTION
(S in Thousands)

FY 06 PROPOSED OPERATING PLAN Procurement, Acquisition and Construction	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Program Support / OMAO							
Fleet Replacement							
OMAO							
ADVENTUROUS Refurbishment	(128)	0			0		0
FAIRWEATHER Refurbishment / Launches & EFH Equipmen	(269)	0			0		0
Small Waterplane Area Twin Hull Vessel (SWATH) & EFH	(5,577)	9,167	9,167		0		0
Upgrades : NANCY FOSTER /OSCAR DYSON/HI'IALAKAI/FAIR	0	1,774		26	1,800	1,430	3,230
Upgrade: GORDON GUNTER	(29)	0			0		0
Naval Surplus Vessels (YTT) (AGATE PASS)	0	0			0		0
Fisheries Survey Vessel #1	(4,065)	2,366	2,366		0		0
Fisheries Survey Vessel Replacement #2	0	0			0		0
Fisheries Survey Vessel #3	15,121	33,513			33,513	(33,513)	0
Fisheries Survey Vessel #4	0	5,519	5,519		0	32,500	32,500
VINDICATOR /HI'IALAKAI Fit Out	2,473	0			0		0
Ship Acquisition, Conversion & Maintenance	4,058	0			0		0
Sonar for Long Range Fisheries Research	5,640	5,618	5,618		0		0
Subtotal, OMAO Fleet Replacement	17,224	57,957	22,670	26	35,313	417	35,730
Aircraft Replacement							
G-IV Instrumentation Upgrades	1,084	3,496	3,496		0		0
Required Safety & Regulatory Upgrades to Various Aircraft	1,329	1,479	59		1,420	(1,420)	0
Turbo Commander Replacement	1,534	0			0		0
WP-3D Navigation Upgrade	1,627	0			0		0
Subtotal, OMAO Aircraft Replacement	5,574	4,975	3,555	0	1,420	(1,420)	0
Total, Program Support - PAC	36,766	63,918	27,211	26	36,733	(1,003)	35,730
TOTAL (Line Office) PAC DIRECT OBLIGATIONS	961,095	1,042,122	172,130	12,158	882,150	84,901	967,051
Total Construction	173,756	186,491	144,300	614	42,805	(1,925)	40,880
Total System Acquisition	764,541	792,699	1,605	11,518	802,612	87,829	890,441
Total Fleet Replacement	17,224	57,957	22,670	26	35,313	417	35,730
Total Aircraft Replacement	5,574	4,975	3,555	0	1,420	(1,420)	0
Total PAC	961,095	1,042,122	172,130	12,158	882,150	84,901	967,051

PAC SUMMARY
(S in Thousands)

FY 06 PROPOSED OPERATING PLAN Procurement, Acquisition and Construction	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Line Office Summary:							
National Ocean Service	103,028	127,050	115,223	173	12,000	2,500	14,500
National Marine Fisheries Service	23,200	31,048	29,077	29	2,000	0	2,000
NOAA Research	21,267	9,663	300	137	9,500	984	10,484
National Weather Service	101,448	79,055	319	1,151	79,887	14,546	94,433
National Environ. Sat. Data & Info Service	675,386	731,388	0	10,642	742,030	67,874	809,904
Planning, Program and Integration	0	0	0	0	0	0	0
Program Support	36,766	63,918	27,211	26	36,733	(1,003)	35,730
TOTAL PAC DIRECT OBLIGATIONS	961,095	1,042,122	172,130	12,158	882,150	84,901	967,051
Financing:							
De-Obligations					(2,000)		(2,000)
TOTAL PAC BUDGET AUTHORITY	961,095	1,042,122	172,130	12,158	880,150	84,901	965,051
Transfers:							
Net Transfer to ORF	(204)	1,043					
Unobligated Balance Rescission	24,881						
TOTAL PAC APPROPRIATION	985,772	1,043,165	172,130	12,158	880,150	84,901	965,051

OTHER DISCRETIONARY ACCOUNTS

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
<u>NOS</u>							
Coastal Zone Management Fund Obligations	0	0		0	0		0
Coastal Zone Management Fund Budget Authority	0	0		0	0		0
Coastal Zone Management Fund Budget Appropriation	0	2,960		40	3,000		3,000
Total, NOS Discretionary Direct Obligations	0	0	0	0	0	0	0
Total, NOS Discretionary Budget Authority	0	0	0	0	0	0	0
Total, NOS Discretionary Appropriation	0	2,960	0	40	3,000	0	3,000
<u>NMFS</u>							
Fishermen's Contingency Fund Obligations	(603)	492	450	(492)	(450)		(450)
Fishermen's Contingency Fund Budget Authority	(603)	492	0	(492)	0		0
Fishermen's Contingency Fund Appropriations	0	492	0	(492)	0		0
Foreign Fishing Observer Fund Obligations	(671)	0			0		0
Foreign Fishing Observer Fund Budget Authority	(671)	0			0		0
Foreign Fishing Observer Fund Appropriation	0	0			0		0
Fisheries Finance Program Account Obligations (incl \$500 PL 107-206)	989	1,368		(1,368)	0	60	60
Fisheries Finance Program Account Budget Authority (incl \$500 PL 107-206)	989	1,368		(1,368)	0	60	60
Fisheries Finance Program Account Appropriation (incl \$500 PL 107-206)	989	629		(629)	0	60	60
Promote and Develop Fisheries Obligations	0			0	0		0
Promote and Develop Fisheries Budget Authority	(62,000)	(65,000)		(12,000)	(77,000)		(77,000)
Promote and Develop Fisheries Appropriation	0			0	0		0
Pacific Coastal Salmon Fund Obligations	84,600	88,216		1,784	90,000		90,000
Pacific Coastal Salmon Fund Budget Authority	84,600	88,216		1,784	90,000		90,000
Pacific Coastal Salmon Fund Budget Appropriation	89,052	88,798		1,202	90,000		90,000
Total, NMFS Discretionary Direct Obligations	84,315	90,076	450	(76)	89,550	60	89,610
Total, NMFS Discretionary Budget Authority	22,315	25,076	0	(12,076)	13,000	60	13,060
Total, NMFS Discretionary Appropriation	90,041	89,919	0	81	90,000	60	90,060
TOTAL, DISCRETIONARY DIRECT OBLIGATIONS	84,315	90,076	450	(76)	89,550	60	89,610
TOTAL, DISCRETIONARY BUDGET AUTHORITY	22,315	25,076	0	(12,076)	13,000	60	13,060
TOTAL, DISCRETIONARY APPROPRIATION	90,041	92,879	0	121	93,000	60	93,060

OTHER MANDATORY ACCOUNTS

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
<u>NOS</u>							
Coastal Zone Management Fund Obligations	0	0			0		0
Coastal Zone Management Fund Budget Authority	(2,305)	(3,000)			(3,000)		(3,000)
Coastal Zone Management Fund Appropriation	0	0			0		0
Damage Assessment & Restoration Revolving Fund Obligation	1,334	1,000		5,000	6,000		6,000
Damage Assessment & Restoration Revolving Fund Budget Authority	1,334	1,000			1,000		1,000
Damage Assessment & Restoration Revolving Fund Appropriation	0	0			0		0
Total, NOS Mandatory Direct Obligations	1,334	1,000	0	5,000	6,000	0	6,000
Total, NOS Mandatory Budget Authority	(971)	(2,000)	0	0	(2,000)	0	(2,000)
Total, NOS Mandatory Appropriation	0	0	0	0	0	0	0
<u>NMFS</u>							
Promote and Develop Fisheries Obligations	17,724	12,539		(12,000)	539		539
Promote and Develop Fisheries Budget Authority	79,724	77,539			77,539		77,539
Promote and Develop Fisheries Appropriation	0	0			0		0
Fisheries Finance Program Account Obligation:	2,897	5,144		(5,144)	0		0
Fisheries Finance Program Account Budget Authority	2,897	5,144		(5,144)	0		0
Fisheries Finance Program Account Appropriation	0	0			0		0
Environmental Improve & Restoration Fund Obligation:	5,305	4,689		1,947	6,636		6,636
Environmental Improve & Restoration Fund Budget Authority	5,305	4,689		1,947	6,636		6,636
Environmental Improve & Restoration Fund Appropriation	0	0			0		0
Limited Access System Admin Fund Obligation	3,311	3,634			3,634		3,634
Limited Access System Admin Fund Budget Authority	3,311	3,634			3,634		3,634
Limited Access System Admin Fund Appropriation	0	0			0		0
Total, NMFS Mandatory Direct Obligations	29,237	26,006	0	(15,197)	10,809	0	10,809
Total, NMFS Mandatory Budget Authority	91,237	91,006	0	(3,197)	87,809	0	87,809
Total, NMFS Mandatory Appropriation	0	0	0	0	0	0	0
<u>PROGRAM SUPPORT / OMAO</u>							
NOAA Corp Commissioned Officers Retirement Obligation	17,151	17,574		930	18,504		18,504
NOAA Corp Commissioned Officers Retirement Budget Authority	17,151	17,574		930	18,504		18,504
NOAA Corp Commissioned Officers Retirement Budget Appropriation							
Total, PS Mandatory Direct Obligations	17,151	17,574	0	930	18,504	0	18,504
Total, PS Mandatory Budget Authority	17,151	17,574	0	930	18,504	0	18,504
Total, PS Mandatory Appropriation	0	0	0	0	0	0	0
Total, Mandatory Direct Obligations	47,722	44,580	0	(9,267)	35,313	0	35,313
Total, Mandatory Budget Authority	107,417	106,580	0	(2,267)	104,313	0	104,313
Total, Mandatory Appropriation	0	0	0	0	0	0	0

NOAA GRAND TOTAL SUMMARY
 Total Other Discretionary Appropriations
ORF, PAC, AND OTHER DISCRETIONARY APPROPRIATIONS

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
Operations, Research and Facilities	2,655,904	2,782,644	477,737	62,788	2,370,581	157,587	2,528,168
Procurement and Acquisition	985,772	1,043,165	172,130	12,158	880,150	84,901	965,051
Coastal Zone Management Fund	0	2,960	0	40	3,000	0	3,000
Fisherman's Contingency Fund	0	492	0	(492)	0	0	0
Foreign Fishing Observer Fund	0	0	0	0	0	0	0
Fisheries Financing Program	989	629	0	(629)	0	60	60
Pacific Coastal Salmon Fund	89,052	88,798	0	1,202	90,000	0	90,000
Total Discretionary Appropriations	3,731,717	3,918,688	649,867	75,067	3,343,731	242,548	3,586,279

SUMMARY OF DISCRETIONARY RESOURCES
 (\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
<u>DIRECT OBLIGATIONS</u>							
ORF Direct Obligations	2,695,345	2,869,490	477,737	74,828	2,466,581	157,587	2,624,168
PAC Direct Obligations	961,095	1,042,122	172,130	12,158	882,150	84,901	967,051
OTHER Direct Obligations	84,315	90,076	450	(76)	89,550	60	89,610
TOTAL Direct Obligations	3,740,755	4,001,688	650,317	86,910	3,438,281	242,548	3,680,829
<u>BUDGET AUTHORITY</u>							
ORF Discretionary Budget Authority	2,698,104	2,869,490	477,737	74,828	2,450,581	157,587	2,608,168
PAC Discretionary Budget Authority	961,095	1,042,122	172,130	12,158	880,150	84,901	965,051
OTHER Discretionary Budget Authority	22,315	25,076	0	(12,076)	13,000	60	13,060
TOTAL Budget Authority	3,681,514	3,936,688	649,867	74,910	3,343,731	242,548	3,586,279
<u>APPROPRIATION</u>							
ORF Appropriation	2,655,904	2,782,644	477,737	62,788	2,370,581	157,587	2,528,168
PAC Appropriation	985,772	1,043,165	172,130	12,158	880,150	84,901	965,051
OTHER Appropriation	90,041	92,879	0	121	93,000	60	93,060
TOTAL Appropriation	3,731,717	3,918,688	649,867	75,067	3,343,731	242,548	3,586,279

NOAA SUMMARY
 (\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
TOTAL Obligations (Discret & Mand)	3,788,477	4,046,268	650,317	77,643	3,473,594	242,548	3,716,142
TOTAL Budget Authority (Discret & Mand)	3,788,931	4,043,268	649,867	72,643	3,448,044	242,548	3,690,592
TOTAL Appropriation (Discret & Mand)	3,731,717	3,918,688	649,867	75,067	3,343,731	242,548	3,586,279
Reimbursable Obligations	235,204	209,204	0	0	209,204	0	209,204
Reimbursable Financing:							
Federal funds	(87,204)	(87,204)			(87,204)		(87,204)
Non-federal funds	(148,000)	(122,000)			(122,000)		(122,000)
Total Reimbursable Financing	(235,204)	(209,204)	0	0	(209,204)	0	(209,204)
TOTAL OBLIGATIONS (Direct & Reim.)	4,023,681	4,255,472	650,317	77,643	3,682,798	242,548	3,925,346

LINE OFFICE SUMMARY
(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term-inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
National Ocean Service							
ORF	500,905	541,245	179,669	7,290	368,866	25,364	394,230
PAC	103,028	127,050	115,223	173	12,000	2,500	14,500
OTHER	1,334	1,000	0	5,000	6,000	0	6,000
TOTAL, NOS	605,267	669,295	294,892	12,463	386,866	27,864	414,730
National Marine Fisheries Service							
ORF	621,341	676,515	126,059	21,840	572,296	53,168	625,464
PAC	23,200	31,048	29,077	29	2,000	0	2,000
OTHER	113,552	116,082	450	(15,273)	100,359	60	100,419
TOTAL, NMFS	758,093	823,645	155,586	6,596	674,655	53,228	727,883
Oceanic and Atmospheric Research							
ORF	393,317	404,106	70,444	3,961	337,623	24,084	361,707
PAC	21,267	9,663	300	137	9,500	984	10,484
OTHER	0	0	0	0	0	0	0
TOTAL, OAR	414,584	413,769	70,744	4,098	347,123	25,068	372,191
National Weather Service							
ORF	723,426	703,926	13,475	33,433	723,884	20,946	744,830
PAC	101,448	79,055	319	1,151	79,887	14,546	94,433
OTHER	0	0	0	0	0	0	0
TOTAL, NWS	824,874	782,981	13,794	34,584	803,771	35,492	839,263
National Environmental Satellite, Data and Information Service							
ORF	151,670	176,060	33,307	6,821	149,574	4,408	153,982
PAC	675,386	731,388	0	10,642	742,030	67,874	809,904
OTHER	0	0	0	0	0	0	0
TOTAL, NESDIS	827,056	907,448	33,307	17,463	891,604	72,282	963,886
Program, Planning and Integration							
ORF	1,979	2,464	464	4	2,004	0	2,004
PAC	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PPI	1,979	2,464	464	4	2,004	0	2,004
Program Support/Corporate Services							
ORF	178,534	169,069	563	6,306	174,812	24,592	199,404
PAC	7,903	986	986	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PS/Corporate Services	186,437	170,055		6,306	174,812	24,592	199,404
Program Support/NOAA Education Program							
ORF	1,484	18,275	18,275	0	0	0	0
PAC	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PS/NOAA Education Program	1,484	18,275	18,275	0	0	0	0
Program Support/Facilities							
ORF	9,162	33,281	6,610	(9,614)	17,057	5,025	22,082
PAC	6,065	0	0	0	0	0	0
OTHER	0	0	0	0	0	0	0
TOTAL, PS/Facilities	15,227	33,281	6,610	(9,614)	17,057	5,025	22,082
Program Support/Office of Marine & Aviation Operations							
ORF	113,527	144,549	28,871	4,787	120,465	0	120,465
PAC	22,798	62,932	26,225	26	36,733	(1,003)	35,730
OTHER	17,151	17,574	0	930	18,504	0	18,504
TOTAL, PS/OMAO	153,476	225,055	55,096	5,743	175,702	(1,003)	174,699
Total PS ORF	302,707	365,174	54,319	1,479	312,334	29,617	341,951
Total PS PAC	36,766	63,918	27,211	26	36,733	(1,003)	35,730
Total PS Other	17,151	17,574	0	930	18,504	0	18,504
TOTAL, PS	356,624	446,666	81,530	2,435	367,571	28,614	396,185
ALL OBLIGATIONS							
ORF	2,695,345	2,869,490	477,737	74,828	2,466,581	157,587	2,624,168
PAC	961,095	1,042,122	172,130	12,158	882,150	84,901	967,051
OTHER	132,037	134,656	450	(9,343)	124,863	60	124,923
TOTAL, ALL OBLIGATIONS	3,788,477	4,046,268	650,317	77,643	3,473,594	242,548	3,716,142
Subtotal, PAC Adjustments	24,881	0	0	0	(2,000)	0	(2,000)
Subtotal, PAC Transfer	(204)	1,043	0	0	0	0	0
Subtotal, ORF Adjustments	2,759	0	0	0	(16,000)	0	(16,000)
Subtotal, ORF Transfers	(42,200)	(86,846)	0	(12,040)	(80,000)	0	(80,000)
Subtotal, OTHER Discretionary	3,774	(157)	0	0	0	0	0
Subtotal, OTHER Mandatory	(47,722)	(41,620)	0	9,267	(32,313)	0	(32,313)
TOTAL, ALL APPROPRIATIONS	3,729,765	3,918,688	650,317	74,870	3,343,281	242,548	3,585,829

LINE OFFICE SUMMARY

(\$ in Thousands)

FY 06 PROPOSED OPERATING PLAN	FY 2004 Enacted (Actual BA)	FY 2005 Enacted (Avail. BA)	FY 2005 Term- inations	FY 2006 ATB's	FY 2006 Base	FY 2006 Program Changes	FY 2006 President's Budget
--------------------------------------	--	--	---------------------------------------	--------------------------	-------------------------	--	---

FY 2006 Strategic Plan

FY 2006 Strategic Plan - ORF

MISSION SUPPORT	380,304	476,218	61,647	13,059	427,630	32,125	459,755
CLIMATE	238,503	250,468	42,610	5,888	213,746	19,649	233,395
ECOSYSTEMS	1,102,162	1,202,415	288,253	14,234	928,396	62,731	991,127
COMMERCE & TRANSPORTATION	172,030	164,661	28,392	13,308	149,577	19,983	169,560
WEATHER & WATER	802,346	775,728	56,835	28,339	747,232	23,099	770,331
	<u>2,695,345</u>	<u>2,869,490</u>	<u>477,737</u>	<u>74,828</u>	<u>2,466,581</u>	<u>157,587</u>	<u>2,624,168</u>

FY 2006 Strategic Plan - PAC

MISSION SUPPORT	872,608	900,041	112,472	10,953	798,522	73,701	872,223
CLIMATE	3,049	6,448	0	93	6,541	0	6,541
ECOSYSTEMS	2,771	59,039	59,039	0	0	0	0
COMMERCE & TRANSPORTATION	0	0	0	0	0	0	0
WEATHER & WATER	82,667	76,594	619	1,112	77,087	11,200	88,287
	<u>961,095</u>	<u>1,042,122</u>	<u>172,130</u>	<u>12,158</u>	<u>882,150</u>	<u>84,901</u>	<u>967,051</u>

FY 2006 Strategic Plan - Other Discretionary

MISSION SUPPORT	0	0	0	0	0	0	0
CLIMATE	0	0	0	0	0	0	0
ECOSYSTEMS	84,315	90,076	450	(76)	89,550	60	89,610
COMMERCE & TRANSPORTATION	0	0	0	0	0	0	0
WEATHER & WATER	0	0	0	0	0	0	0
	<u>84,315</u>	<u>90,076</u>	<u>450</u>	<u>(76)</u>	<u>89,550</u>	<u>60</u>	<u>89,610</u>

FY 2006 Strategic Plan - Other Mandatory

MISSION SUPPORT	17,151	17,574	0	930	18,504	0	18,504
CLIMATE	0	0	0	0	0	0	0
ECOSYSTEMS	30,571	27,006	0	(10,197)	16,809	0	16,809
COMMERCE & TRANSPORTATION	0	0	0	0	0	0	0
WEATHER & WATER	0	0	0	0	0	0	0
	<u>47,722</u>	<u>44,580</u>	<u>0</u>	<u>(9,267)</u>	<u>35,313</u>	<u>0</u>	<u>35,313</u>

FY 2006 Strategic Plan - TOTAL OBLIGATIONS

MISSION SUPPORT	1,270,063	1,393,833	174,119	24,942	1,244,656	105,826	1,350,482
CLIMATE	241,552	256,916	42,610	5,981	220,287	19,649	239,936
ECOSYSTEMS	1,219,819	1,378,536	347,742	3,961	1,034,755	62,791	1,097,546
COMMERCE & TRANSPORTATION	172,030	164,661	28,392	13,308	149,577	19,983	169,560
WEATHER & WATER	885,013	852,322	57,454	29,451	824,319	34,299	858,618
	<u>3,788,477</u>	<u>4,046,268</u>	<u>650,317</u>	<u>77,643</u>	<u>3,473,594</u>	<u>242,548</u>	<u>3,716,142</u>

FY 2006 Strategic Plan - TOTAL APPROPRIATIONS

MISSION SUPPORT	1,252,912	1,376,259	174,119	24,012	1,226,152	105,826	1,331,978
CLIMATE	241,552	256,916	42,610	5,981	220,287	19,649	239,936
ECOSYSTEMS	1,189,248	1,351,530	347,742	14,158	1,017,946	62,791	1,080,737
COMMERCE & TRANSPORTATION	172,030	164,661	28,392	13,308	149,577	19,983	169,560
WEATHER & WATER	885,013	852,322	57,454	29,451	824,319	34,299	858,618
	<u>3,740,755</u>	<u>4,001,688</u>	<u>650,317</u>	<u>86,910</u>	<u>3,438,281</u>	<u>242,548</u>	<u>3,680,829</u>



United States Department of Commerce
National Oceanic & Atmospheric Administration
14th & Constitution Avenue, N.W.
Washington, D.C. 20230
www.noaa.gov

National Ocean Service
www.nos.noaa.gov

National Marine Fisheries Service
www.nmfs.noaa.gov

Office of Oceanic and Atmospheric Research
www.oar.noaa.gov

National Weather Service
www.nws.noaa.gov

National Environmental Satellite, Data and Information Service
www.nesdis.noaa.gov

Office of Marine and Aviation Operations
www.oma.noaa.gov